DEPARTMENT OF AGRICULTURE

VICTORIA

BULLETIN No. 43

PRESERVING FRUITS AND VEGETABLES

PRICE 2/6

Mrs. B. Thrifty says:-

Now is Fruit Bottling Time!

IT'S A FAMILY AFFAIR!

There's one task in the kitchen in which Mother welcomes the assistance of the family. Like doing the dishes after dinner, this is truly a family affair and in thousands of Australian kitchens today this scene is being enacted. The fruit is ripe; it has been gathered from the garden and orchard or bought at the market and shops, and now it's ready to be bottled.

Young Judith and John know, just as well as Dad, that helping Mother now with the bottling means that the family will be able to enjoy these delicious fruits the whole year round! The thought of Peach or Apricot Pie in the middle of winter spurs them all on in this pleasant task. That's why we say *IT'S A FAMILY AFFAIR.*

Join the thousands of Australian families who are now busy bottling this season's fruit crop. Order a Fowlers Bottling Outfit and experience the satisfaction of knowing that your pantry shelves are well stocked with delicious fruits bottled at a fraction of their normal cost.

OBTAINABLE FROM ALL LEADING STORES THROUGHOUT AUSTRALIA

FOWLERS VACOLA MANUFACTURING COMPANY LIMITED

HAWTHORN VICTORIA – ROSEBERY N S W

DEPARTMENT OF AGRICULTURE

VICTORIA

BULLETIN **No. 43.**

PRESERVING FRUITS AND VEGETABLES

CONTENTS.

	Page.
Fruit Bottling	3
Jams and Conserves	22
Marmalade	37
Orange Conserve	41
Jelly Making	43
Fruit Pulping	50
Fruit Puree	52
Fruit Drying	54
Herb Drying	60
Various Fruit Dishes	62
Candying Citrus Peels	70
Crystallized, Candied, and Glazed Fruits	74
Fruit Juices	77
Fruit Butters	79
Aromatized Vinegars	81
Preserving of Vegetables	83
Vegetable Drying	84
Pickles and Sauces	87
Sweet Spiced Fruits	96
Chutney	98
Ketchup and Sauces	102
Dry-salting French Beans	104

Wholly Set Up and Printed at the Government Printing Office, Melbourne.

How's your Balance?

. . . . . Not your physical balance, but your bank balance.

Physical balance is very important to a tight-rope walker, and calls for regular and persistent practice.

What is more important to you as a home manager is your bank balance. You can build it up by regular and consistent deposits—if you bank first and shop afterwards. £1 banked every week over a period of 5 years will amount to more than £273.

THE STATE SAVINGS BANK OF VICTORIA

"Your Bank"

BOTTLING FRUIT *for* HOME USE

A TASTEFULLY arranged fruit-barrow or shop window rarely fails to attract the eye and appeal to the aesthetic instinct that is present in most of us. The colourful fruits bring vividly to the mind pictures of laden orchards and rural scenes at once restful and pleasing, and also the thought, that with the coming of late autumn and winter they will have disappeared from barrow and shop, and another year must pass before their return.

The importance of fruit and vegetables in the diet has become widely recognized in recent years. The term " balanced diet " used so commonly nowadays means, simply, that the various types of food are taken in the correct proportions. Heat and energy-producing foods, containing starch and fat, such as bread, cakes, and pastry, are almost always present in sufficient quantity—often in too high a proportion. These foods provide the largest part of our diet.

Frequently, however, diet is lacking in one or more of three other types of food, namely, those containing minerals, vitamins and roughage or fibre. In most cases, there is sufficient of these substances to prevent deficiency diseases, but insufficient for good health. Roughage or fibre is the fibrous part of fruits and vegetables. This roughage acts as bulk in the intestines, preventing constipation.

The most important minerals are calcium for bones and teeth; iron for the blood; iodine for the proper functioning of the thyroid gland, and phosphorus for the body cells. These minerals are found in green, leafy vegetables, such as spinach, cabbage—particularly the outer leaves—silver beet, sprouts, lettuce, and turnip tops, and in lesser amounts in fruits and root vegetables.

In bottling, only fresh first quality fruit should be used, and if processed in the absence of air for a short period at boiling point, the resulting product should retain most of its vitamins.

Dried vegetables and fruits are lower than fresh in vitamin content, and cannot be considered as a complete substitute. Dried vegetables are useful for soups and flavouring when fresh ones are unobtainable. Dried peas can be germinated, then used. If this is done, the vitamin content will be greatly increased. The sulphuring process improves colour and protects dried fruit and vegetables from insects but increases destruction of vitamins.

Pickled vegetables may contain vitamin. Sauer kraut or pickled cabbage is an example. Generally, acidity due to the presence of a large quantity of vinegar, and the presence of condiments which often act as irritants, make pickles less useful as a food than bottled vegetables. They should not be given to children, and should be used sparingly by adults.

Where possible, the daily diet should include fresh fruits, such as apples and oranges, a fresh salad, tomatoes, celery, lettuce, a root vegetable, a leafy green vegetable and potatoes. Where freshly picked raw fruits are unobtainable, bottled products may be used instead. These products, if carefully prepared, are preferable to cold storage foods, which gradually lose vitamin content. Stewed and dried fruits should be used in the menu, but not wholly to replace the fresh product.

There are a number of ways of dealing with fruit and vegetables, all of which come under the heading of "preserves." Each method, of course, differs very much from the other, yet to be able to make the most of what we have, a knowledge of the different methods will be found to be a distinct advantage, because they can be worked one with the other, thus reducing the possibility of waste.

Destructive Organisms.

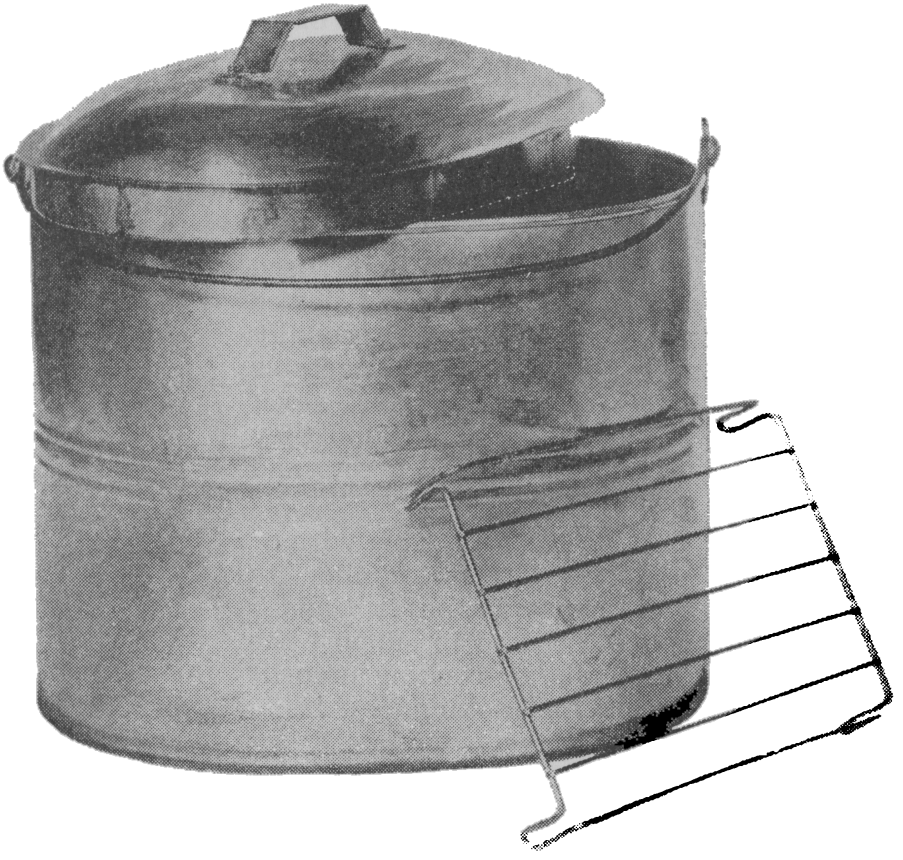
It is absolutely necessary in the preservation of foods to completely destroy all the minute plant organisms and if those met in the process of canning or food preserving are not destroyed fermentation or putrefaction will be set up in the contents after the containers have been sealed. Consequently, when preserving food, it must be processed until all organisms and spores are destroyed, and then sealed in containers to prevent subsequent contamination.

Suitable Sterilizing Vessels with Platform.

These organisms may be classed, roughly, into three groups bacteria, yeasts, and moulds. Though they are present in the air, in water, and on all surfaces, they are so small that their presence can be detected only by the use of a microscope or by the changes which they bring about in the food materials. Yeasts and moulds are the more common enemies of bottled fruit, while vegetables are usually attacked by bacteria.

In order to develop, yeasts require moisture, sugar, and warmth. The presence of yeasts is the cause of fermentation and in fruit preserved for dessert, fermentation is undesirable, therefore the development of yeasts must be arrested. This can be accomplished by heat, as they are destroyed at a temperature of 170° F.

All moulds are not harmful, as for example, those used in the ripening of cheeses. It is not desirable, however, that they should be allowed to germinate on fruits before or after preservation. Like yeasts, moulds require moisture and air to allow them to develop, and are destroyed at a temperature of 170° F.



Another type of Sterilizing Vessel and Platform.

Sterilizing Vats.

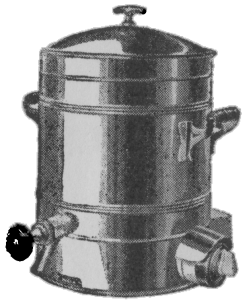
Any vessel having a well-fitting lid and which is deep enough to hold a platform about three or four inches high, and the containers in which the fruit is packed, may be used as a sterilizer, e.g., the washing copper, or a kerosene tin, a tin billy, or a boiler. The vessel chosen

depends on the quantity of fruit to be preserved. The platform mentioned should be about 2 inches less in diameter than the vessel, and can be made by using two cleats of wood about 3–4 inches high for supports. Across these, narrow strips of wood are nailed at equal distances to form a shelf. Sometimes a wire meat roaster or cake stand is used. When the washing copper is used, the round perforated shelf from a meat safe, placed on two bricks, will serve as a platform. If anything made of metal is used, however, it should be covered with a folded cloth or some straw to prevent the bottles cracking. The object of this platform or false bottom is to support the containers and to prevent them from coming in contact with any water, as in our method the fruits are cooked by steam. The platform should be placed in the sterilizing vessel, with sufficient water to reach just below its surface. Any of the smaller vessels mentioned, may be used on gas, open fire places, kitchen ranges or other fire.

Electric Urns and Boilers.

Several reliable makes of electric urns and boilers suitable for sterilizing fruits are now available. Most of these are fitted with a three-heat switch control, so that a high, medium, or low temperature may be maintained easily during the cooking.

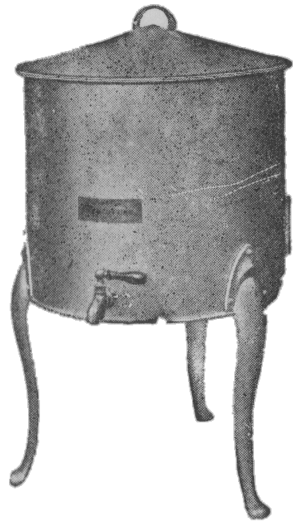
They are also fitted with a tap for convenience in draining off the water, and some makes have an automatic device which cuts off the current should the water boil away.



A suitable electric urn.

These boilers may be used on the electric light or power plug, and will serve equally well as a fruit and vegetable sterilizer, food cooker, stock pot, or water boiler, and they are easily kept sweet and clean.

A small removable wire or wooden platform similar to those shown on pages 4 and 5 should be used to support the jars, cans, or cooking utensils during the cooking.



An efficient electric boiler.

Fruit may also be successfully bottled in an electric or gas oven. For oven processing the jars should be placed in a shallow pan containing a folded towel and an inch or two of water. The temperature may be regulated as desired. If a slow heat is used, say 160° F., or 180° F., a longer time should be allowed than for a stronger heat.

Suitable Containers.

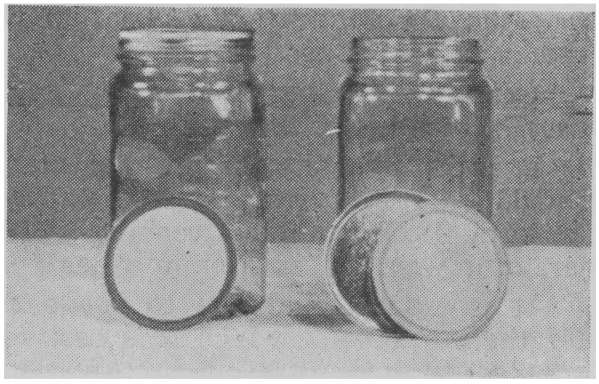
The only additional outlay worth mentioning would be that for suitable jars or containers. This item of expense is heavy only for the first year, for, with ordinary care, the jars give many years of satisfactory service.

Any jar or container which can be made quite airtight will be suitable. It is advisable to make sure that the lids fit each individual jar; they may be tested by placing each cover on its jar without a rubber band, and if it rocks when pressed with the fingers it is defective, but it will sometimes fit another jar of the same make perfectly. If the jars contain wire clamps, they should be tightened, if necessary, each time the jar is used. The screw top jars are favoured by some preservers, but others find these difficult to screw and handle while hot.

Most of the zinc top lids have a porcelain or glass setting inside the lid, which is very necessary, as the zinc should not be allowed to come in contact with the contents, because of the acid contained in many fruits. Gold-lacquered caps are often used; these caps are washed in lacquer, and are claimed to be unaffected by fruit acids which come in contact with them.

Some of the preserving jars are made of a tinted glass, which give the preserve a dull or darkish appearance, so that it is not so attractive in appearance, but this is of little importance, as the fruit keeps equally as well in these jars, provided they are airtight.

The new "Utility" jar with screw top and metal insert is also very good. These jars can be obtained at most large stores at reasonable prices. When using these jars screw the lids with metal inserts inside them, lightly on before sterilizing. After sterilizing is completed, they should be screwed on as tightly as possible. To open the jar, unscrew the lid, turn the jar upside down and dip the top into hot water for a few minutes, then gently prize up the insert with a sharp knife, but take care not to pierce it too far. The inserts can be used a second time if they are in good order.



The New "Utility" Jar.

Red rubber bands will give good service as long as they are not perished or cracked, and they may be used twice or even three times. When not in use, they should be stored away from the light. Black rubber bands may taint the fruit. To prevent this, the bands should be boiled gently for 10 minutes in a little of the syrup to be used. then they should be rinsed well and rubbed between the hands. They should be well dried, then left exposed to the air for a few days. Rubber bands should always be sterilized before use.

Glass jars require careful treatment, so as to prevent breakages. The work must not be carried on in a draught of cold air, nor should the hot glass come in contact with cold metal, or be splashed with cold water, &c. Care must be taken also when sterilizing bottles for this or other purposes not to place the jar suddenly into hot water, nor to pour

hot liquids into cold glass jars without first binding them round with a wet cloth. These may seem small matters, though they are of great importance to the beginner, who would probably have to learn them by experience.

Pickle bottles may also be utilized for bottling small fruits; these require deep corks, which need to be sterilized by boiling in water, and should fit the bottle very tightly; then, after corking, and while the contents are still quite hot, cover with sealing wax, paraffin wax, or hot clean mutton fat; the latter process may be done by melting a little in a small tin vessel and dipping the top of the bottle to a depth of half an inch.

The Selection and Classification of Fruit.

This is a matter of importance, as much of the success attained in bottling and preserving in general will depend upon a good selection for each purpose.

The product to be bottled or canned should be of that quality which could be classed as first grade. It should be of good colour, with a firmness of flesh, free from blemishes, and have a good pronounced flavour. It should not be overripe, as it requires to be sufficiently firm to stand the application of heat to which it is subjected, and still retain natural shape.

Generally speaking, mid-season fruit is preferable, being firmer and usually of a better flavour.

In order to make the package attractive in appearance, the fruit should be regularly and neatly packed in the container, and be of uniform size, so that the cooking will be done evenly throughout the jar, otherwise the smaller or riper fruits will be over-cooked.

It is advisable always to grade the fruit carefully, using each for the purpose for which it is best suited, some grades being better adapted to one form of preservation than another; for instance, bottling and canning, pulping, drying, jams, jellies, and pickling of both fruit and vegetables all come under the heading of " preserves," though, of course, the selection or grading and treatment in each case is vastly different, and, if unnecessary waste is to be avoided, each portion must be used to the best advantage.

Preparation of Syrup.

The syrup in which the fruit is preserved may be of any desired strength, and may be varied according to taste and convenience. When the amount of sugar is large the syrup is described as being " strong " or " heavy," but where a small quantity is used to the same amount of water, it is, of course, " weak " or " light." A heavy or strong syrup will cause the fruit to rise to the top of the jar, leaving a space of clear syrup below. This does not matter in the least for household use, but it is unsightly, and when staged in exhibitions would lose points.

From 4 to 6 oz. of sugar to a pint of water makes a medium syrup, which would be suitable for most fruits, and is palatable; but quantities may be varied to suit individual requirements. Honey may be used

instead of sugar. As the use of honey solely will give a strong honey flavour, it is advisable to use half quantity of honey and half quantity sugar.

In making or preparing syrup, the water is measured into a kettle or other convenient vessel, brought to boiling heat, the sugar weighed according to the strength required, then added to the water, and the whole boiled for 8 or 10 minutes. If the boiling be unduly prolonged, the water evaporates, leaving a stronger or heavier syrup than intended. Strain through a clean piece of muslin before using. The fruit may be put up in plain water without the addition of any sugar, and will keep equally as well. Prepared this way the fruit is suitable for diabetics. The flavour is very much better if the fruit be put up in syrup rather than in water with the sugar added later.

Packing the fruit into jars.

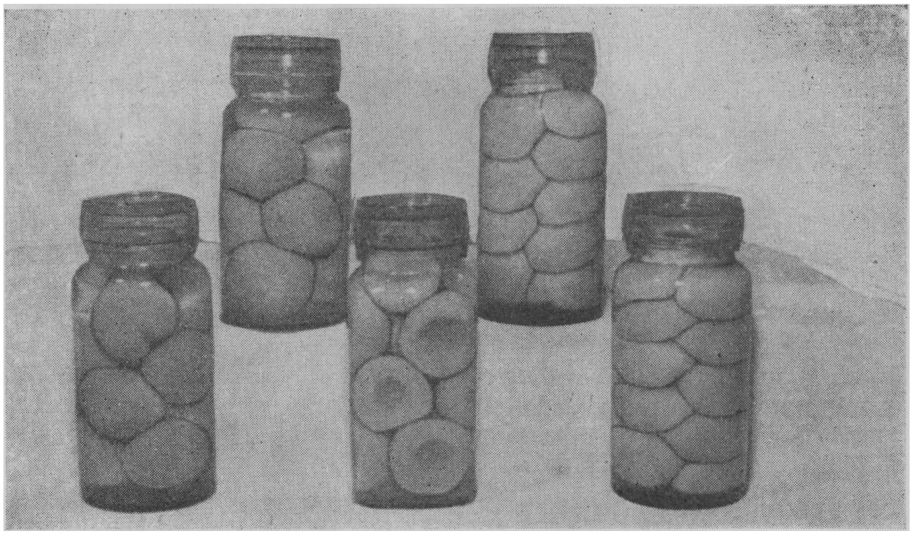
Preparation of Fruit.

After grading, wash all fruit thoroughly; where convenient, a spray of water is desirable for soft berry fruits as sand and grit are more easily removed in running than in still water. This can be managed by attaching to the tap a small piece of hose or tubing, with a sprinkler on the end, which can be gently moved over the fruit, the tap being only partly turned on, as a strong stream would probably damage such soft fruits. No fruit should be left in water for any length of time, but when sufficiently washed it should be drained, placed in jars, and processed for a given period or until cooked. When the "discolouring fruits" (see "*b*" under heading "Application of Syrup" p. 10), are being prepared, they should be placed in a basin of slightly salted water, until the desired quantity is ready and then rinsed, packed into jars and covered with cold syrup. The salt water solution prevents discolouration. Different fruits require different periods of exposure to heat in order to become thoroughly processed. The periods given for the various fruits mean from the time the water in the vat reaches boiling point not before— and in each instance applies to

quart or 2-lb. jars, while the time necessary for processing larger or smaller containers varies somewhat. These times should be used as a guide only, as the time for processing varies with each season. A simple method for testing the fruit, to ascertain if it is sufficiently cooked, is described below.

Testing Fruit with Needle.

While the fruit is being sterilized, it can be easily tested by using a sterilized darning needle or hat pin. Remove the lids from both the sterilizer and the jar containing fruit, then probe well down into the fruit. When soft the fruit is sufficiently cooked, it can be removed from the vat and finished as previously described. When this is being done care should be taken to see that the inside of the lid does not come in contact with any dampness, as the micro-organisms which are always present in the air may settle on the lid and if the fruit is ready to be removed, they will enter the jar when sealed, and prevent it from keeping. Testing the fruit with a needle lessens the tendency to over-cooking, which spoils the appearance of the fruit and causes it to rise in the jar.



Various methods of packing peaches.

Application of Syrup.

Fruits are divided into three separate groups for the application of the syrup:—

(*a*) *Soft Berry Fruits.*—These fruits are packed firmly into the container without the addition of syrup as they contain sufficient moisture to cook them. When sterilization is finished, they are overflowed with boiling syrup and sealed down immediately.

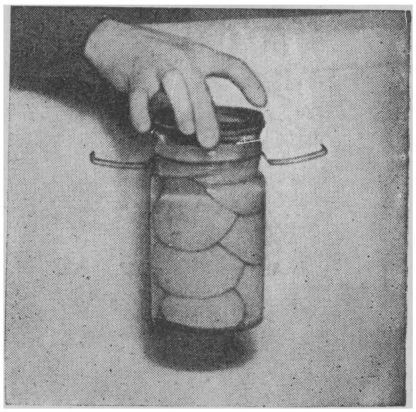
(*b*) *Discolouring Fruits.*—Some fruits which are peeled, such as peaches, pears, quinces, apples, &c. Pack into the container and cover with cold syrup before cooking. Overflow with boiling syrup when finished and seal.

(c) *Other Fruits.* Pack into the container with a small quantity of cold syrup (about one tablespoonful), and when sterilized, overflow with boiling syrup and seal.

Overflowing the jars with syrup.

STERILIZING AND FINISHING.

After preparing the fruit it should be packed firmly into jars, using for the purpose (when required) a flat blunt packing stick made of soft white wood, taking care not to penetrate the skin of the fruit; often slight pressure is used to advantage; a good, firm pack avoids excessive empty space, due to shrinkage after cooking. Then add the syrup according to the type of fruit being used, as described above. The lids should be placed loosely on the jars, without the rubber band, and the sealing levers left unfastened. Sterilize for the desired length of time, and when cooked, remove the jars on to a piece of damp cloth, gently overflow each jar with boiling syrup, which should be ready in a kettle or some other convenient vessel, then adjust the sterilized rubber rings, and immediately clip or screw down the lids. The jars should be taken from the sterilizer, overflowed with syrup and sealed one at a time, otherwise the contents of the jars will cool, and cold air carrying micro-organisms will enter and spoil the fruit. To test the seal, when cold, loosen clips and lift jar by the lid only as shown in the accompanying illustration. If using vacuum self-sealing jars, they may be sealed either before or after cooking. When using jars with screw tops and metal inserts, the lids should be screwed lightly on, then tightened after sterilization.



Testing for a perfect seal.

Oven Sterilizing.

Gas, electric, or woodfire ovens may be used for processing. The oven is heated slightly, about 200°F., the fruit is packed into warm jars and covered with hot syrup, the lid put lightly on. The jars are placed on a cloth in a baking dish containing about an inch of water and a gentle heat maintained until the fruit is cooked—about half an hour to 45 minutes. On removal from the oven overflow with boiling syrup and seal immediately.

Peaches.

Any variety may be used, but the firm yellow-fleshed kinds such as Sim's Cling, Phillips' Cling, Pullar's Cling, Lemon and Orange Cling, Levis Cling, Goodman's Choice, Nicholls' Cling, Golden Queen, &c., are generally preferred, as they do not break in the boiling as readily as some other varieties, and have a good flavour when cooked.

They should be peeled, but may be left whole or cut as desired.

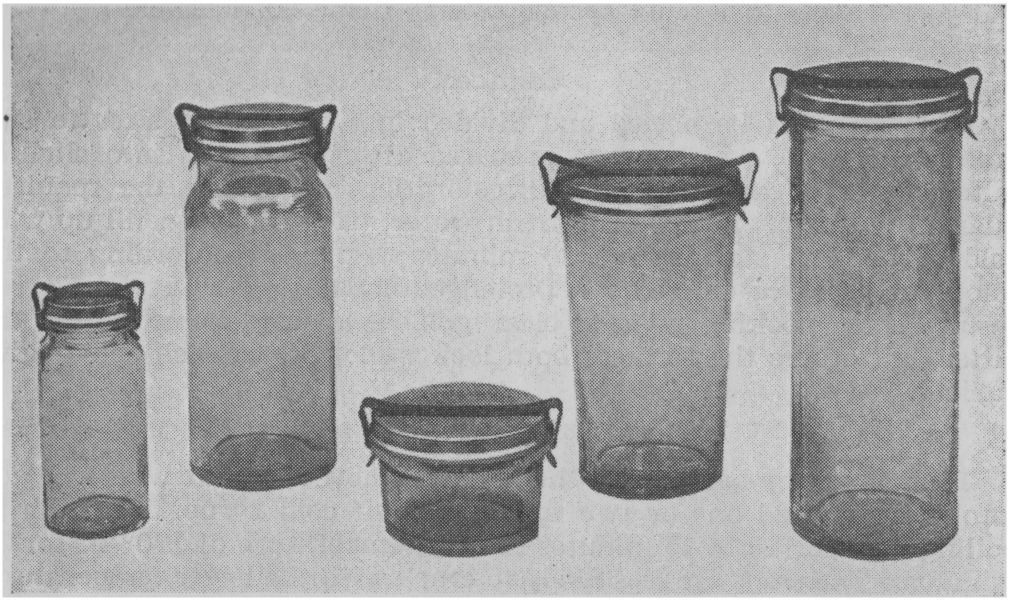
To remove the stone from the clingstone varieties, take a sharp knife and before peeling, cut the fruit right round close to the stone, then twist the halves in opposite directions, when they will separate easily, and then with a pitting spoon, or sharp-edged teaspoon, cut out the stone.

Peaches being dipped in boiling caustic solution to remove skins.

The halves may be peeled either by hand with a sharp knife, or by immersing them in a boiling caustic solution. To each quart of water allow 1 oz. caustic soda (about 1 tablespoonful), and when boiling put the peaches in a fish kettle or piece of old clean linen, and suspend in the soda dip for 40 or 50 seconds (according to stage of ripeness) and then rinse in several changes of fresh cold water, when

all the skin will have peeled off, leaving a smooth clear surface. This dip is suitable for the hard-fleshed peaches only; the softer varieties should be dipped in boiling water or peeled by hand; the latter method is a slow process, and if treated this way the fruit should be put into slightly salted water while the desired quantity is being prepared, then rinsed, packed in jars, and at once covered with cold syrup.

Sterilize the soft varieties about 30 minutes, and the hard yellow-fleshed kinds 40 minutes. Finish as described on page 11.



Vacuum self-sealing preserving bottles.

Apricots.

For a showy and attractive pack, many prefer the whole fruit where the perfect shape can be retained. Where economy of space is desired, halving the larger specimens is advised, and a few blanched kernels added will give a nutty flavour.

When packed in jars, add just a little of the cold syrup (about one or two tablespoonsful), put lid loosely on, and sterilize 20 to 25 minutes.

Finish as described on page 11.

Pears.

The Williams' Bon Chretien and Packham's Triumph, owing to their white flesh and good flavour, are much favoured for bottling. They should be treated when just turning colour.

The Kieffers and other varieties preserve well. These fruits discolour if left exposed to the air; they should therefore be dropped into slightly salted water as they are peeled or cut. When a sufficient quantity is prepared, rinse in fresh water, pack the fruit into jars and immediately cover with cold syrup. If desired, flavourings such as a

few cloves, a little cinnamon or ginger may be added. Honey syrup may be used successfully for pears. Sterilize 25 to 30 minutes, according to size of jar.

The winter pears may be given a longer period to obtain a deeper colour if desired. Finish as described on page 11.

Nectarines.

This fruit may be halved and the stone removed, or left whole. It is sometimes peeled, but this is not necessary. Pack in jars, and add just a very little cold syrup. Sterilize for 20 minutes.

Quinces.

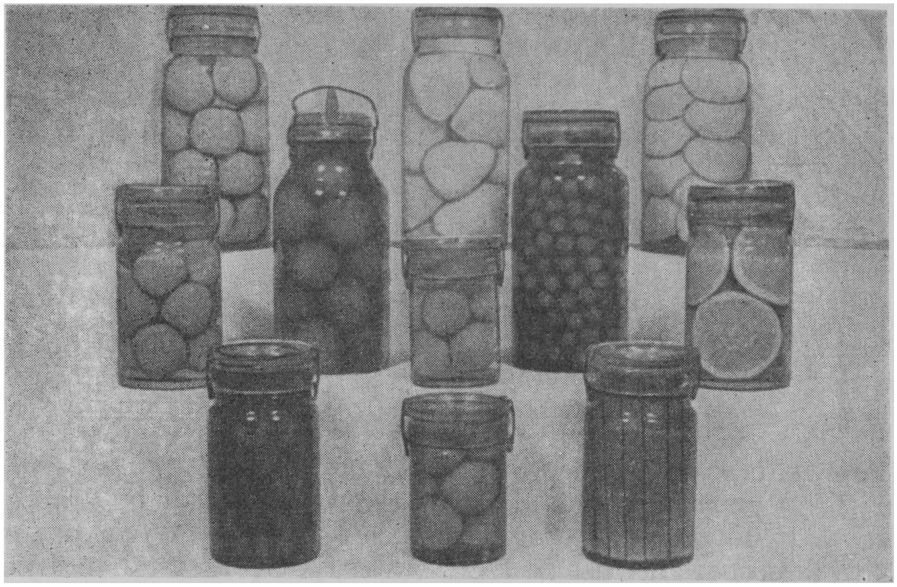
Quinces should be peeled and divided into convenient sizes to suit preserving jars. As they are prepared drop the pieces into slightly salted water so as to prevent discoloration, and when the required quantity is ready rinse well in fresh water, pack into jars, fill up with cold syrup, and sterilize for 30 minutes or longer, according to the colour of preserve desired. A prolonged cooking gives a pink to red result; short cooking gives a clear golden colour. Some prefer the latter, but others the former; both look well; jars of each colour give variety.

Plums.

Plums may be halved and the stones removed, or left whole. Pack into jars and add one or two tablespoons of cold syrup. Sterilize at boiling heat for 10 to 15 minutes or at a temperature of 170° F. for 30 minutes. The skins are less likely to crack with the lower temperature.

Preserving Plums in their own Juices.

Many kinds of plums are particularly suited for winter puddings and pie fillings. In the method of preservation set out below no water is added; therefore neither flavour nor colour is lost. Select plums when



Some attractive packs of bottled fruit.

just firm-ripe. The natural acidity at this stage of maturity, though requiring a little sugar, will be found to make a much more palatable preparation than that made from fully ripe plums to which no sugar is added.

Method.—Wash the fruit and pack it very firmly into the preserving jars. Use a slight pressure so as to avoid too much waste space. Sprinkle lightly with sugar as the jar is being filled; usually about 2 tablespoons of sugar to the pint jar is liked, and about 3 to 4 tablespoons to the quart size, and 4 or 5 to a half-gallon jar. When the jars have been filled with plums, put the lid or cap lightly on each, but do not seal. Then stand them in the sterilizer, and allow the water in the sterilizer to come to the boil, and keep it boiling for 25 to 30 minutes. During the sterilizing, quite a lot of juice will be drawn from the plums, and before a jar is sealed it should be filled up from another jar of the same batch. They should be sealed at once while at a high temperature then lifted from the sterilizer and placed on a folded wet cloth until cold. They are then ready for storing away for winter requirements.

Plums which are particularly suited for this mode of preservation are:—Early Rivers, Orlean, Diamond, Green Cherry Plum, Grand Duke, President, Satsuma, and others.

Very nice conserve may be made at any time from plums stored in this manner. Allow three-fourths of a cup of sugar for each cup of bottled plums, and boil together rapidly until the conserve is of the desired consistency.

Apricots, raspberries, loganberries, mulberries, gooseberries, red and black currants may also be treated by this method.

Cherries.

Wash, grade, and remove stems without tearing the flesh, pack firmly into jars, add a tablespoonful of cold syrup, and sterilize for about 15–20 minutes.

Most cherries are suitable for bottling, but the following varieties give a product with a very attractive appearance because of their dark flesh:—Early Rivers, Early Purple Guigne, Tartarian, Black Bigarreau, Florence, St. Margaret, and Bedford Prolific.

Gooseberries.

For appearance it is advisable to bottle gooseberries when green, but not immature. Better results are obtained with this fruit if a weaker syrup is used (2 oz. sugar to one pint water). A stronger syrup shrivels the skins. It is also wiser to sterilize at a lower temperature to avoid cracking the skins. Sterilize for 15–20 minutes at 170° F.

Raspberries.

Firm raspberries should be selected. Wash lightly and quickly, drain and put gently into jars, occasionally tapping the jar on the table to shake the fruit down. Place in boiler without any syrup, as the berries contain enough moisture for steaming. Boil for about 10 minutes, then fill jars with boiling syrup and seal.

Loganberries.

Treat same as raspberries.

Currants—Red, White, and Black.

Treat same as raspberries.

Bottled Strawberries.

Select large berries, wash them quickly before hulling, and thoroughly drain, grade for size, and place in a large bowl. Meanwhile, make a strong syrup, using 2 parts sugar and 1 part water. which should be boiled to thread degree; also add a little strained lemon juice. When the syrup is boiled to the right degree, pour over the strawberries, keeping them submerged for about twelve hours or so; then bring to a simmering heat, gently cooking for about 10 minutes, and again allow them to cool slowly in the same syrup.

They may be removed with a skimmer and packed firmly into preserving jars, covered with the syrup in which they have been cooked, and then processed at a temperature of 212° F. for 15 to 20 minutes and then sealed airtight at once.

Red currant juice added to the syrup in place of lemon juice gives excellent results.

Passion Fruit.

Remove the pulpy portion from the shells, add a little strong syrup if desired, or it may be preserved without sugar. Pack into pint containers and process for half-an-hour at 180 deg.

In making syrup, allow 2 parts sugar and 1 part water, and boil to the thread degree.

Mulberries and Blackberries.

Mulberries and blackberries also should be washed quickly and removed from the water, drained, sorted, and packed carefully. Time for processing, 10 to 15 minutes.

Oranges.

Oranges, though not commonly preserved, are very tasty in this form if bottled in a heavy syrup made of 12 oz. sugar to each pint of water, and boiled for a few minutes. Having cut the oranges into thick slices, drop them in and simmer for 3 minutes; then allow them to stand till cool, and pack the slices neatly but firmly into the jar, strain the syrup, fill the jars to overflowing, and then place them in the vat as in the case of other fruit, and heat for about 40 minutes before sealing. This particular preserve improves by keeping, and should be stored at least several weeks before using. The syrup will then have become strongly flavoured with the orange and the peel saturated with syrup. If a very mild preserve is required, steep either the whole or the sliced fruit in fresh cold water over night; then drain and, if desired, repeat the process. The navel orange is a favourite, but other sweet sorts may be used. The pips, of course, should be carefully removed.

Oranges also may be peeled and the fruit slices peeled. The slices will take a shorter time to sterilize than the unpeeled fruit and less sugar (6 oz. sugar to 1 pint water) may be used.

Mandarins.

Mandarins are treated similarly to oranges, excepting that they are usually preserved whole.

Pineapple.

There are several methods of bottling pineapple. The following one should result in a nice tender preserve:—

Peel the fruit, remove the eyes carefully, and cut into slices of even thickness; then with a round sharp cutter stamp out the centre core, taking care not to jag the edges. Immerse the slices in water at simmering heat, and allow them to simmer gently for fifteen minutes; they are then ready to be packed into the preserving jars. Fill up with syrup and sterilize for 30 minutes, and then seal.

The Syrup.—The water in which the fruit has simmered should be used to make the syrup. This is done by allowing them from 4 to 6 oz. of sugar to each pint. Let it boil for eight or ten minutes, strain thoroughly, and pour it into the jars of pineapple. If preferred, the pineapple may be cut into oblong lengths of an even size, or into small or larger squares; or, after peeling, it may be grated finely when it would be convenient for serving in various fruit punches, salads, &c.

A second method of preserving the fruit, which varies slightly from the above, is also used. The fruit is prepared and packed into the jars in its raw state. The jars are filled with cold syrup and sterilized for about 40 minutes. Finish in usual manner.

Figs.

Make a syrup by boiling 1 pint water and ¾ lb. sugar for 5 minutes, put in the figs (peeled) and simmer gently for ¾ to 1 hour. Allow to remain in syrup until cold, then pack neatly into jars and fill with the syrup, then sterilize 45 minutes in the usual way and seal immediately. if liked the syrup may be flavoured with a little ginger or any other desired flavouring.

Fruit Salad.

Pare, core, or stone, and cut into fairly even sizes the following fruits, allowing a slightly smaller quantity of the strongly flavoured fruits:—Pears, apples, peaches, apricots, pineapples, oranges, and also, if liked, passion fruit.

Pack attractively into preserving jars with a sprinkling of sugar throughout the pack. Bananas may also be sliced and added, but they should be first sprinkled with sugar to prevent them discolouring.

Put the lids loosely on the jars, and stand jars on the platform in the sterilizer. Keep them at boiling heat for three-quarters of an hour; then quickly seal, and remove jars from the sterilizer and allow to cool.

Rhubarb.

Pack firmly into jars in long evenly graded sticks or in short lengths (about 1 inch). The latter is an economical method as waste is avoided. A weaker syrup than normally is used and the jar filled with cold syrup before sterilizing. Time for processing, 8 to 10 minutes.

Rhubarb and Apple.

Winter rhubarb, cut into one-inch lengths and packed in the preserving jars in alternate layers with thick slices of apple, makes an attractive and tasty dish. The appearance of the pack is improved if the apple slices are stamped out with a fancy cutter of uniform size.

Cumquats Preserved Whole.

2 lb. whole cumquats (after cooking)—2 lb. sugar, 1 qt. water.

Thoroughly clean the cumquats—if necessary scrub the fruit with a mild soap and water—rinse well and drain. Scald the cumquats with boiling soda water, or sprinkle the fruit with dry soda (about one heaped tablespoon of soda to one quart of fruit, and then cover with boiling water, and let stand in the soda bath until cool. Pour the soda water off and rinse the fruit thoroughly through two or three changes of cold water. Drain well and slit each cumquat with a sharp pointed knife to prevent them from bursting open while cooking. Drop into sufficient boiling water to cover and cook for 10 to 15 minutes (until tender). After this the seeds can easily be removed. Boil the sugar and water together for 10 minutes, add the drained cumquats, and cook until the fruit is shining, clear and transparent. The fruit will keep its shape better if the cooking is done in a covered pan. Carefully place the fruit into trays, pour the syrup over it, and allow to remain overnight to plump. Reheat and pack the cumquats into sterilized jars, strain and pour syrup over them, process pint jars at 180° F. for 15 minutes, and seal tightly while hot.

Tomatoes—Method 1.

Blanch the tomatoes for 2 minutes in boiling water, then plunge into cold water and peel with a sharp knife. Pack into jars. Put a tablespoon of brine in the bottom of the jar and process as for fruits. (See page 11.) Time required 25 to 30 minutes for quart jars. Overflow with boiling brine and seal.

Tomatoes—Method 2.

Peel the tomatoes by blanching. Boil them gently in a preserving pan for 20 minutes, adding a little salt, pepper, sugar, but no water. Place them at boiling temperature into hot sterilized jars or tins with press-in lids and seal immediately.

N.B.—Tomatoes are easily preserved owing to the presence of acid and can be treated as fruit.

THE OPEN PAN SYSTEM.

This is another successful way in which fruit may be preserved, and is a very simple process.

The preserving pan or any flat-bottomed enamel-lined or aluminium pan would be suitable, and the cooking may be done on either a gas stove or ring, kerosene stove, kitchen range, or on an open fire. Prepare in the usual way only as much fruit as can be cooked while it still retains its freshness and good colour; put it in the vessel and pour over it sufficient syrup to well cover the contents; then bring gradually to boiling point and gently cook. Care must be taken not to boil too rapidly or the fruit will become broken, and lose in appearance. The time required will depend upon the variety of fruit under treatment, but until cooked through is sufficient.

Raspberries or extremely soft berry fruits are not altogether suitable for this method, as they incline to lose their shape, and are liable to suffer to a certain degree when being ladled from pan to bottle. Firmer fruits are more suitable.

Preparation must be made to see that the containers are ready to receive the boiling fruit the moment it is cooked. It will be necessary to heat the glass jars before they are filled, in order to prevent breakage. When ready, place the hot bottle on a damp folded towel in a shallow dish, and using an aluminium funnel having a sufficiently wide outlet to permit a ready passage for the fruit, gently fill the jar to overflowing with the boiling fruit and syrup from the preserving pan, wipe the rim of the jar, and make sure that the rubber ring which goes on next is carefully flattened in its groove or on the shoulder of the jar, as the case may be, and see that no particle of fruit or seed from the fruit finds lodgment there, as this would probably cause a leak. Then firmly and quickly fasten the lids by means of the wire clip, or screw tightly according to jar, and allow to cool gradually. As in the sterilizing method, it is necessary to work away from a draught, and to make sure that the jars are airtight.

A convenient way to sterilize the utensils and bottles for this purpose is to heat them gradually in a separate pan of clean water; they may all be set on a wooden rack or meat roaster, with a folded cloth over the wires. Fill the bottles with water, stand them in an upright position, and pack the ladles and other utensils around the jars. The rack or meat roaster serves the purpose of keeping the jars from direct contact with the bottom of the pan. The bottles should be permitted to remain with the water boiling in them for a few minutes, then drained and filled while still hot.

AN OLD METHOD.

Another method which is over 100 years old, but still much used, is as follows:—

The fruit should be selected, graded, and prepared as previously described, then packed into the jars, and each filled with cold syrup, and the lids put tightly on. The jars may then be placed in the copper or vat containing enough cold water to reach to about the shoulder of

the jars; each one being packed around with straw or cloth to prevent the several bottles from rattling together when the water boils, and possibly causing breakages.

The whole is brought gently to boiling point, and allowed to remain for the required length of time for cooking, which would be gauged according to variety and stage of ripeness. Then the jars should immediately be sealed and made air-tight while at boiling point.

Jars being filled with boiling fruit and syrup.

Good results are obtainable by this method, but the disadvantage is that there is a certain amount of unnecessary work attached to the packing around the jars, and more time and fire are required to heat the body of water contained in the copper or vat. Time and firewood both are saved by sterilizing with steam as in the first method described.

If the foregoing instructions are carefully carried out, and care taken to obtain air-tight containers, there should be no chance of failure, and the preserves should keep indefinitely.

HINTS FOR SUCCESSFUL BOTTLING.

1. The fruit must be thoroughly cooked.
2. The bottles must be airtight.
3. The fruit will rise in jar if overcooked, or if too strong a syrup is used.
4. Use firm, sound fruit.
5. For an attractive pack, grade the fruit for size and colour.
6. To avoid a cloudy syrup, thoroughly cleanse the fruit and strain the syrup.

7. Never use old rubbers. They should be strong and in good condition. If rubbers are cracked, an airtight seal cannot be obtained. Rubbers should be sterilized, either by boiling in water for 5 minutes, or by placing in the sterilizer with the fruit when cooking.

8. Bottle rims and lids should be examined and those with chips discarded.

9. If fruit "works" a few days after sterilizing, a bad seal or insufficient cooking is the cause. Loosen the lid and sterilize again for about 10 minutes (according to size). Then overflow and seal properly.

10. Store fruit in a cool, dry dark place. If exposed to a strong light, the colour will fade.

11. To open jars, if the lid is difficult to remove, tear out the rubber band or immerse the jar in warm water. Do not attempt to prize open the lid with a knife as this will crumble the glass or dent a metal lid. A distorted or damaged lid cannot make a perfect seal. It is more economical to spoil the bands than the lids.

12. Jams can be made from bottled fruit.

The Resin Seal.

A very satisfactory seal can be made for any glass jar no matter what size or shape but it is advisable not to use it unless it is impossible to obtain rubber bands or new lids. Put 8 oz. of resin, 1 oz. beeswax, 1 oz. vaseline into a tin and stand in a saucepan of boiling water to melt. Mix well. Cut circles of clean cloth about 1½ to 2 inches wider than the top of the jar and circles of paper (thick) to exactly fit the top of the jar. Paint the melted mixture over the centre of the cloth and press the piece of paper over the centre of it, leaving a margin of mixture around the outside. The cover is now finished. These covers may be prepared some days before using. When the fruit is sterilized, the jars are filled with boiling syrup and the cover is pressed on *but make quite sure that the paper exactly covers the top of the jar.* It should then be tied around with string. Press out all the folds around the rim. The seals are more easily handled if the hands are kept wet as the mixture is very sticky.

Home Made Jams & Conserves

ALL jams may be made from fresh fruit or from fruit pulp. Good jam should keep well. It should be clear and bright in colour, well set—but not too stiff, and there should be a distinct fruity flavour. It is not easy to be successful on all these points, because materials used may vary in every household; fruit differs according to variety, season, and ripeness; pans are different in shape and size, and also the method of heating varies according to the type of stove used.

Fruit Suitable for Jam Making.

Fruit to be used for jam should be fresh and, if anything, slightly under-ripe, but not immature. In some cases, a mixture of whole ripe and firm ripe fruit may be used, as the ripe fruit will help to give a good colour and flavour, while fruit which is of a firmer texture contains pectin and acid. These latter substances are required in jam to form a jellied consistency and a good set. Fruit which is over-ripe is unsuitable for jam, as it loses both flavour and power to set. Fruit used should be as dry as possible, as 1 lb. of dry fruit is proportionately richer in pectin and acid than the same weight of wet fruit, in which water accounts for some of the weight. The amount of pectin in firm-ripe fruit varies from one season to another. For instance, after a period of fine, dry weather, the fruit contains less moisture and more pectin than after a period of wet weather.

Pectin and Acid.

Pectin is a starch-like substance which is found in the cell walls of many varieties of fruits. When by the agency of heat it is dissolved in water or juice, together with acid and sugar, it forms in jam a firm jellied consistency. Pectin and acid are generally found together, and the extent to which pectin is extracted from the cell walls of the fruit depends upon the amount of acid in the fruit when being heated and also upon the breaking up of the fruit. If the fruit in jam remains whole, it cannot be expected to form a firm set, such as is generally the case with conserves. Some fruits contain much more pectin and acid than others. Red, black and white currants, soft berry fruits, firm ripe plums, green apples, quinces, citrus fruits, and fruits with a tart flavour generally possess good quantities of pectin and acid. Apricots, pears, peaches and sweet cherries and very ripe fruits are lacking in the necessary qualities, and unless assisted, the jams obtained from these fruits will not be of such firm thickness. The presence of acid is important, and if the fruit being used is one to which the addition of a little acid is necessary, it should be placed in the pan with the raw fruit, as the

action of acid in the cooking fruit helps to extract the pectin. Furthermore, not only is acid essential to a good set, but it brightens the colour of the jam, may improve the flavour, and help to prevent crystallization of the sugar. Tartaric or citric acid or lemon juice may be used to supply this ingredient, and the quantities should be—

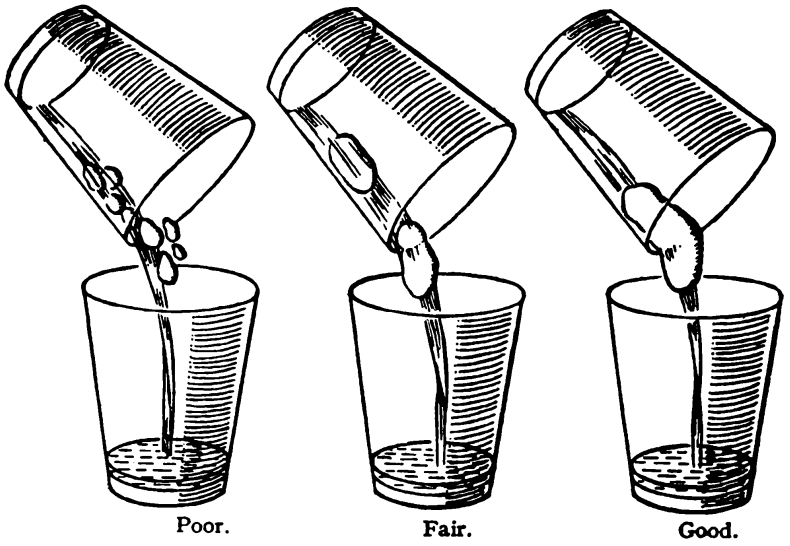
Tartaric or citric acid: 1 level teaspoonful to 2 lb. of raw fruit.

Lemon juice: 2 tablespoonsful of lemon juice to 2 lb. of raw fruit.

Care should be taken to see that all acid crystals are crushed and in powder form.

The Pectin Test.

The amount of pectin in the fruit decides the quantity of sugar to be used. Accordingly, when the jam maker is in doubt as to the amount of sugar to be added to fruit which is perhaps over-ripe or out of season, it is advisable to make what is known as the "pectin test."



Pectin Clots. [Brit. Min. Agr. and Fish.

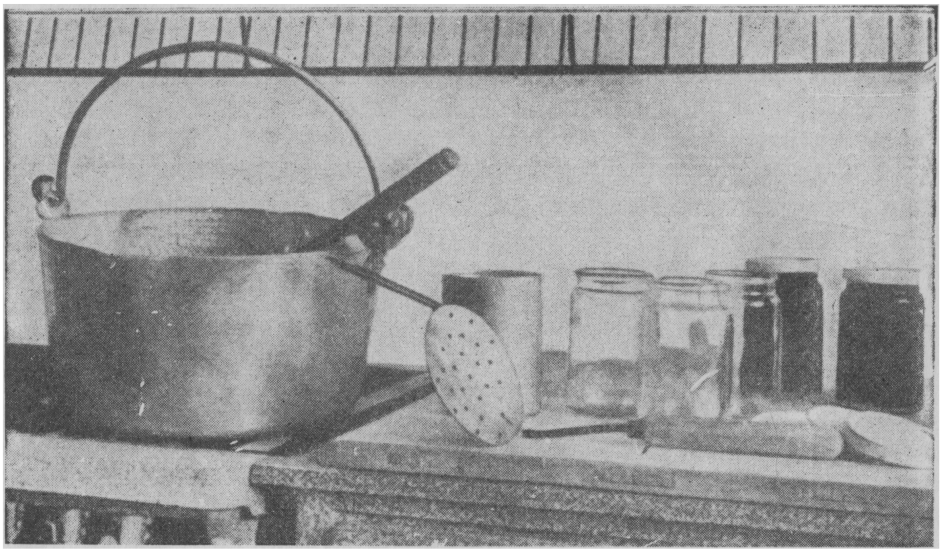
To make this test, prepare the fruit and put in on to cook, with or without water, according to the variety used. After it has been boiling from 15 to 45 minutes, and the fruit is in a pulp, take from the mixture 1 teaspoonful of juice, place it in a cup and allow to stand until cool. Three teaspoonsful of methylated spirits should then be added. Shake the mixture together gently and leave it for one minute, then pour it into another receptacle. If there is a large amount of pectin in the fruit, the juice will become a firm, jelly-like clot. If there is just a normal proportion of pectin present, the clot will be broken up into two or three pieces, whereas, if the clot is very poor and badly broken, it indicates that the pectin present is quite insufficient. If this test reveals that the clot is firm and jelly-like, the sugar may be added in the right proportion and the jam maker may feel certain that the jam will set well. A common fault is to use too little sugar when a fruit is rich in pectin, with the

result that the jam is too stiff. It should be remembered that the more pectin there is in fruit, the more sugar can be added. When the test has resulted in a very good clot, 1 to 1¼ lb. sugar may be added to 1 lb. of fruit; and if the clot is only fair, ¾ to 1 lb. sugar may be used. If the clot is very poor, the sugar may be added, but the jam will not set well, and will result in a sticky syrup. In this case commercial pectin may be procured and used in the proportions advised in the directions.

It must be realized that when pears, cherries, peaches and other fruits which are deficient in pectin and acid are used for jam, the result will not be the same and, although the product may be firm, it will not have the same jelly-like set.

Cooking the Fruit.

In the process of jam-making, the fruit should be cooked for some time before the sugar is added. This causes the fruit to break up and the pectin to be extracted and then dissolved in the juice. Some fruits take less time for their pectin to dissolve than others. All berry fruits, with the exception of gooseberries, should be brought to boiling point as soon as possible and simmered gently from 10 to 15 minutes



Jam-making equipment. [Brit. Min. Agr. and Fish.

only. This extracts the pectin and ensures a good flavour and bright colour. Currant fruits and plums should be allowed to boil from half to three-quarters of an hour, or until their skins are thoroughly soft. If the sugar is added too soon, the skins become toughened at once, and this cannot be remedied. Sugar generally has a hardening effect on fruits, and should not be added until the fruit is cooked, or unless the fruit is required to keep its shape as in conserve.

After the fruit has been cooked and is thoroughly soft, the sugar should be added. All except berry fruits require fairly long and slow cooking with the lid on the pan before the sugar is added. Then, rapid boiling with the lid removed is a very good rule in jam-making, for it

means that the jam will have a fruity flavour, a bright clear colour, and a firm consistency, provided the correct proportion of sugar has been used. A clear, firm set or a good consistency will not occur until the pectin, acid, sugar, and juice are in the right proportion to one another, and before that is brought about, some moisture must be driven off. If the sugar is added too soon, that is, before some of the juice has evaporated, it means that the fruit and sugar have to be boiled for a long time together before the pectin, acid, and sugar are in the right proportion. This results in the jam failing to set properly and becoming a thick, sticky mass. Furthermore, the long boiling and the high temperature to which the sugar raises the jam destroys the pectin, turning it into pectic acid. This latter acid does not dissolve in water, and prevents a true set being formed. The long boiling will destroy both colour and flavour also.

GENERAL METHOD OF MAKING JAMS AND CONSERVES.

Jams.

Prepare the fruit and put it into the pan with the necessary amount of water. Large fruits such as plums, quinces, apples and other varieties which are of a firm texture take more water than most berry fruits. Place the lid on the pan and cook the fruit gently until it is soft and tender and the colour partly drawn, then add the sugar and allow it to dissolve. The mixture should then be boiled rapidly without the lid on the pan until it is of a good consistency, or the syrup falls from the stirring rod or spoon in uneven sheets or thick flakes. (See directions for flake test.) Remove it from the heat, and fill into clean, dry jars which have been placed on a damp cloth to prevent the jars from cracking. Jam made from quinces, pears, and apples, requires a more gentle cooking than that made from other fruits, to allow it to gain the rich red colour which is natural to it.

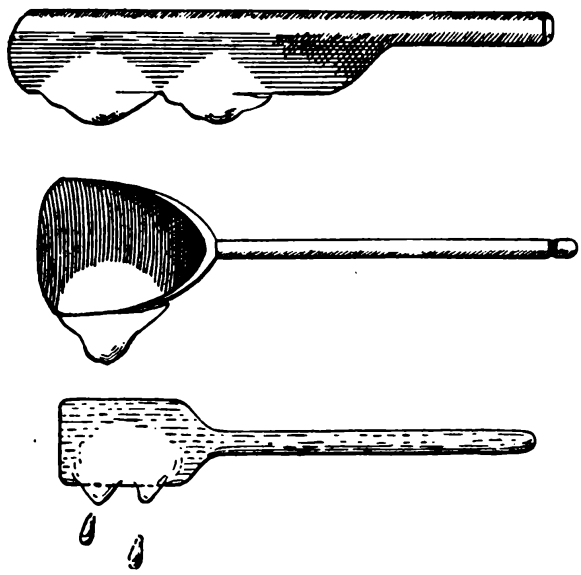
Apricots, peaches, pears, figs, &c., will result in a jam of nice thickness rather than one of a jellied consistency, because of their lack of sufficient pectin and acid.

Conserves.

When the fruit remains whole in the syrup and does not break up, the mixture is known as conserve. As sugar has the effect of slightly hardening the surface of fruit, it is either put straight into a weak syrup and cooked, or part of the amount of sugar to be used is strewn over the fruit and it is allowed to stand overnight, as with melon jam, the remainder of the sugar being added when the fruit is being cooked.

Testing the Jam for Setting.

(*a*) **Temperature Test.**—The jam or jelly may be tested for setting by the use of a Fahrenheit thermometer. When the temperature has attained 218-222 degrees, the jam or jelly is sufficiently cooked and should be taken from the heat.



The flake test.
[BritMin. Agr. and Fish

(*b*) **Cold Plate Test.**—About 1 teaspoonful of the mixture is taken from the jam and cooled on a plate. If it crinkles when pushed with a spoon, the jam is ready to set.

(*c*) **Flake Test.**—After the jam has been cooking for 15 to 30 minutes dip the stirring rod or spoon in, then hold it well up from the jam horizontally first turning once or twice to slightly cool the mixture. Then turn the rod on edge, and if the syrup breaks off in uneven sheets or flakes, allow the jam to boil for a few minutes longer, then bottle.

Faults and Remedies.

1. **Mould** requires dampness for growth and occurs where the seal is imperfect. There are several remedies for the prevention of its growth:—

(*a*) Be sure that containers are thoroughly dry.
(*b*) Store in a cool dry place.
(*c*) Thoroughly cook jam to evaporate excess moisture.
(*d*) Fruit used in jam-making should be firm-ripe and not mushy.
(*e*) When jams are affected by mould, remove the mould and half an inch of the surface jam.

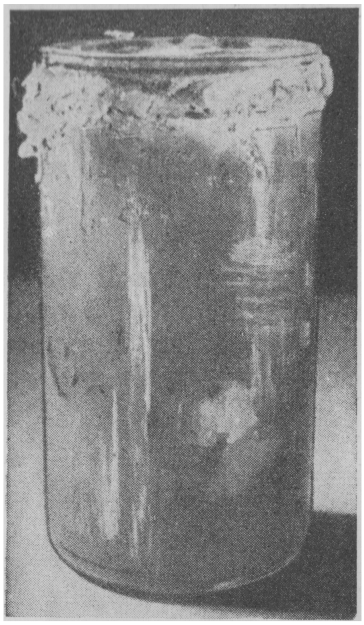
Mould on the surface of plum jam.

2. **Crystallization** may be due to the under-mentioned causes:—

(*a*) The use of too much sugar.
(*b*) Over boiling.
(*c*) Allowing jam to boil rapidly before sugar is thoroughly dissolved.
(*d*) The use of too much sugar on fruit when allowed to stand overnight. This forms a crust around the portions of fruit which is not easily dissolved in cooking.

3. **Fermentation** is caused by
   (*a*) The use of insufficient sugar.
   (*b*) Insufficient cooking.

If jam is only slightly fermented, it may be re-boiled with the addition of a little extra sugar.



Fermentation in a jar of apricot jam.

RECIPES.

Apple Ginger.

6 lb. cooking apples.
4½ lb. sugar.
¼ lb. whole ginger.

Peel, core, and slice the apples. Cover the peelings and cores with water and simmer them for about half an hour, then strain. To this strained liquid add the prepared apples and bruised ginger (the latter tied in muslin) and simmer about 1½ hours. Then add sugar and cook till of a good consistency.

Apple Marmalade.

6 lb. apples.
9 lb. sugar.
6 pints water.
6–9 lemons.

Slice lemons thinly. Soak them overnight in the 6 pints of boiling water. Next morning put on and cook till rinds are tender. Peel and cut up apples. When rinds are tender, add apple and cook till tender, add sugar and cook quickly till it will set, about half-an-hour.

Quince and Ripe Tomato Jam (Mock Raspberry).

3 lb. quinces.
2 lb. ripe tomatoes.
4 lb. sugar.
1 pint water.

Peel, core, and slice the quinces. Pour boiling water over the tomatoes to remove the skins. Simmer quinces and tomatoes in the water for 1½ hours. Then add sugar and boil rapidly till it responds to setting test.

Fig and Pineapple Jam.

4½ lb. figs (after being peeled).
2½ lb. grated pineapple.
3 tablespoons of strained lemon juice.
1 pint water.
7 lb. sugar.

Peel and slice the figs and simmer with the pineapple and water till tender, then add the sugar and lemon juice, and boil until of a good consistency.

Dried Apricot and Pineapple Jam.

2 lb. apricots.
1 large pineapple.
7 lb. sugar.

Soak apricots overnight in just enough water to cover. Next day grate or very thinly slice the pineapple and add it. Simmer till cooked, then add the sugar and boil till of a good consistency.

Fig Jam.

6 lb. rips figs, 3 lemons or 2 teacups of vinegar, ½ lb. preserved ginger, 6 lb. sugar, 1 pint water.

Peel and slice the figs, slice the lemons and ginger very thinly. Simmer till fruit is well cooked, then add the sugar and boil till a good colour and consistency. Some may like the addition of 3 or 4 bird's-eye chillies, and some may prefer to substitute 1 large pineapple (grated) for the ginger. If the figs are very dry, more water will be needed.

Two methods of covering jams.

1. Vinegar paper and screw tops.

2. With melted paraffin wax or candle grease. Jams made from pectinous fruits (sour apples, firm plums, citrus fruits, quinces, &c.) generally are of a firmer consistency and are inclined to keep much better than jam made from non-pectinous fruits. When the set is firm and fairly stiff, the jam may be sealed either hot or cold with cellophane or brown paper. When non-pectinous fruits are used (cherries, strawberries, apricots, peaches, &c.), it is wiser to seal the jam when hot with melted paraffin wax or candle grease, or with paper dipped in vinegar and pressed on to the surface of the jam.

Raspberries, Loganberries, &c.

Raspberry Jam.—The berries should not be over-ripe and fermenting. If selected at the right stage, the best result will be gained by bringing the mass to boiling heat without adding any water, stirring from the bottom of the preserving pan to prevent scorching. When boiling temperature is reached throughout the mixture, add the sugar —pound for pound of the fruit; stir well, so as to dissolve the sugar before the mixture reaches boiling heat again, then boil very rapidly for 8 minutes, when the jam should be of a good colour and consistency. Pour off into the prepared receivers, which should have been previously scalded, and thoroughly drained by standing upside down on a thick folded damp cloth; allow the jam to set, and then cover the surface with a thin coat of paraffin or other desired method of sealing.

Should the berries be more watery or riper than is desired, the boiling should be continued for a few moments before adding the sugar.

If the amount of sugar allowed is less than the weight of fruit, a longer boiling is advised.

Loganberry Conserve—

6 lb. loganberries (not fully ripe).

6 lb. sugar.

2 pints of water.

Make a syrup by boiling the sugar and water together for 5 minutes or so, then add the fruit and bring to the boil; cook rapidly for about 15 to 20 minutes or until of the right consistency.

The *Raspberry and Loganberry* makes a good jam if blended in equal quantities or in any desired proportion. For a mixture of these two fruits, from 10 to 15 minutes may be allowed at boiling heat before adding the sugar, and 5 to 8 minutes at boiling temperature after sugar is dissolved. The cooking should be done rapidly, and, as in the case of jam from either raspberries or loganberries, if less than an equal amount of sugar to that of fruit is used, give a longer boiling.

Loganberry jam may be made as described for raspberry and loganberry, and if one-third of the berries selected are used before they are fully ripe, a better consistency and colour is gained. Another mixture which makes an agreeable blend is as follows:—

Loganberry and Green Gooseberry Conserve—

Green gooseberries—6 lb.

Firm red loganberries—6 lb.

Water—2 quarts.

Sugar—10 to 12 lb., as may be desired.

Method.—Boil the gooseberries gently in the water for about 30 to 35 minutes, or until a slightly pink tint is noticeable, then add the loganberries and cook at boiling heat for another 5 minutes, then add the sugar, and when dissolved, boil the mixture rapidly, until the product is of a rich, clear red colour; when tested on a cold plate it

should readily respond to the usual test for jelly. When this stage is reached, allow to cool down a few degrees before conveying it into the sterilized containers.

Loganberry and Cherry Plum is another blend which gives a nice result—

Loganberries (firm red)—3 lb.
Cherry plums—3 lb.
Sugar—4½ lb.

Put the plums on to cook with about one cupful of water, and when they are cooked fairly soft add the loganberries, and boil for another 10 minutes; then add sugar and bring to boiling heat after sugar is dissolved, then boil fast until of a good consistency.

Dried Apricot Jam.

1 lb dried apricots.
2 quarts water.
4 lb. sugar.
1 oz. bitter almonds.

Cover apricots with boiling water in which a teaspoon of carbonate of soda has been dissolved. Soak about half an hour, then rub off all dust (and skins if desired), rinse, and add 2 quarts water. Soak 24 hours, then boil gently with the almonds till the fruit is cooked. Add the sugar and boil till a good consistency.

Pineapple may be added if desired instead of almonds.

Dried Peach Jam.

1 lb. dried peaches.
2 quarts water.
4½ lb. sugar.
2 lemons.

Make in the same way as described for dried apricot jam.

Pear Ginger.

4 lb. pears.
3 lb. sugar.
1 quart water.
1 lb. preserved ginger.
Grated rind of two lemons (yellow part only).
3 tablespoonsful vinegar.

Method.—Peel, core, and slice the fruit; grate the yellow part of the lemon peel. Cut the ginger into even sections. Meanwhile make a syrup of the vinegar, water and sugar, allowing it to boil for five minutes or so; then pour it over the prepared fruit, and allow to remain for 24 hours. Simmer altogether slowly for about two hours, or until the colour and consistency are as desired. The more slowly this preserve is cooked, the deeper the colour.

Mulberry and Diamond Plum Conserve.

In many old established gardens, a mulberry tree or two will often be found, but some housewives find the fruit rather rich for conserves when used alone. They may be tried in this way:—

2 lb. ripe mulberries.
3 lb. diamond plus (firm ripe).
4 lb. sugar.
½ pint water.

Method.—Put the plums and water into a preserving pan; put lid on pan and allow them to cook for ten minutes; then add the mulberries and allow another five minutes. Remove the lid altogether, add the sugar, and boil rapidly until the juice will respond to the jellying test; this usually takes about 20 minutes. If the plums are full ripe, omit the water and add two tablespoons lemon juice, but be careful not to put any lemon peel in.

Plums.

There is quite a variety of plums from which to make a selection for jam; purple, red, and light. The Orleans and the Blue Diamond both give a nice colour and good-flavoured product. The light plums are favoured by some, and of these also several varieties are suitable. Greengages give a better result if the fruit is not over-ripe.

With most varieties, if portion of the fruit selected is slightly under-ripe the finished product has a more jelly-like thickness and a better appearance.

It is not always advisable to sprinkle the sugar over plums overnight before cooking (unless they are peeled, and this is not usual), as the sugar sometimes causes the skins to become tough.

The average amount of sugar for most plums is from ¾ lb. to 1 lb. for each lb. of fruit, though some prefer only ½ lb. for each lb. of greengages. Where so small an amount of sugar is used the boiling should be continued for a longer period. The product in such cases does not look as attractive, nor is its keeping quality as reliable as when the larger quantity of sugar is used.

Plums are usually put on to cook in a little water, or weak syrup if preferred. The mass should be brought to boiling point rapidly so as to retain the brightness of colour, and it should be kept at boiling point for 30 minutes or so, according to the variety of plums. Then add the sugar and bring the whole to boiling heat again, finishing the cooking rapidly, testing occasionally until it drops heavily from the stirring rod.

The following blends make a change, and give good results:—

Cherry plum and gooseberry—3 lb. plums, 2 lb. gooseberries, 5 lb. sugar, ¾ pint water.

Light plum and peach—equal quantities of peaches and plums.

Light plum and pineapple—6 lb. plums, 1 pineapple, 4½ lb. sugar, ½ pint water.

Dark plum and raspberry—make as for plum and mulberry.

Loganberry and Orlean Plum Conserve.

2 lb. loganberries.
4 lb. Early Orlean plums.
6 lb. sugar.

Boil rapidly together for 30 minutes or until sufficiently thick.

Raspberry and Strawberry Conserve.

3 lb. raspberries.
3 lb. strawberries.
6 lb. sugar.

Sprinkle the strawberries with half the quantity of sugar, and allow to remain overnight. Then cook slowly for fifteen minutes or so, with the lid on the pan, then add the raspberries and balance of sugar. Finish the cooking without a lid on the pan, and keep the mixture boiling very rapidly. As soon as the desired consistency is gained the conserve is ready for bottling.

Apples.

The peels, cores, and windfalls may be treated in the following manner, and kept in reserve for using with fruits such as strawberry, blackberry, and others.

Method.—Take a fair quantity of windfalls, cores, and skins of any or several varieties of apple. Put these into a preserving pan, cover them with water, bring to simmering heat, and allow them to cook slowly for a fair time, so as to extract the "goodness" from the fruit; then strain through a large sieve; afterwards run the liquid through a muslin, and then bring it to boiling heat, and hermetically seal in suitable containers whilst at that heat. It may then be stored for future use, and will be found most useful for improving other fruits, such as strawberries, &c. There is no pronounced flavour in the apple, yet it is one of the most valuable fruits we have in assisting others.

Black Currant Jam.

The black currants should be in a nice firm condition. Weigh them and allow ½ pint water and 1¼ lb. sugar to each lb. of berries. Simmer the fruit and water for about 20 minutes, then add the sugar. When this is dissolved, boil rapidly until it responds to the setting test.

If the fruit has become very ripe, much less water should be added (about 1 pint to 6 lb. of fruit).

Blackberry and Apple Jam.

6 lb. blackberries.
Juice of 2 lemons.
2 lb. apples.
8 lb. sugar.

Prepare apples, slice and cook in a little water till tender. Add blackberries and lemon juice and continue cooking till blackberries are cooked. Add sugar and boil rapidly till jam well set.

Strawberry Conserve.

6 lb. strawberries (firm).

2 pints red currant juice.

6 lb. sugar.

Cover the strawberries overnight with half their weight of sugar; then cook them, for about 20 minutes or so, in the juice, which the sugar has extracted; then add the red currant juice, and allow to boil up again for a few moments; add the remaining portion of the sugar, and when dissolved finish the cooking rapidly.

Another nice conserve can be made from the following:—

2 lb. strawberries.

1 pint apple water.

2½ lb. sugar.

The method is the same as that described for the other strawberry conserve.

Quince Jam.

Pare and core the fruit, cutting it into sections of desired size, and then cover with water. Cook gently until the quinces are tender, add the sugar at the rate of three-quarters of a pound of sugar to each 1 lb. fruit used. Continue the cooking until the conserve is of a nice rich red tint, when it should be ready for setting into the containers.

Melon and Ginger Jam.

12 lb. melon.

9 lb. sugar.

½ lb. green ginger.

About 6 or 9 small bird's-eye chillies.

Peel, seed, and cut the melon into sections; put into an enamel or earthenware bowl with half the sugar sprinkled throughout the melon. Allow this to remain overnight. Scrape the green ginger and cut it finely, then boil all together slowly until the melon is thoroughly cooked. Add the balance of the sugar, and when this is dissolved, continue the boiling until the jam is of a good colour and consistency.

The small chillies should be tied in a little piece of clean muslin, and cooked in the jam, then removed before bottling. Some housewives prefer to put water with melon jam, as there is then less danger of its crystallizing with keeping. If water be added, allow half a pint to each pound of melon.

Melon and Seville Orange Jam.

12 lb. melon.

1 lb. Seville orange.

3 quarts water.

12 sugar.

Make as described for melon and ginger.

Melon and Grapefruit Jam.

8 lb. melon.
½ lb. grapefruit.
1½ pints water.
6 lb. sugar.

Make as described for melon and ginger.

Melon and Green Tomato Jam.

4 lb. melon.
4 lb. green tomatoes.
1 pint water.
¼ lb. preserved ginger.
6 lb. sugar.

Method.—Peel, seed, and cut up the melon; peel and slice the tomatoes; slice the ginger; boil altogether for about an hour. Then add the sugar and boil till of a good consistency.

Raspberry and Red Currant Jam.

2 lb. red currants.
4 lb. raspberries.
6 lb. sugar.

Stem the currants, and put them into the preserving pan. Crush them a little so as to draw the juice; then boil gently for eight or ten minutes with the lid on the pan; then add the raspberries and sugar. When the sugar has dissolved, boil rapily, without the lid, for ten or fifteen minutes, or until sufficiently thick.

Other nice blends are—

Early Orlean plum and raspberry.
Grand Duke plum and mulberry.
President plum and mulberry.
Rhubarb and wild blackberry.

Cape Gooseberry Conserve.

6 lb. cape gooseberries.
1 quart water.
5 lb. sugar.

Method.—Make a syrup of the sugar and water by boiling it for 10 minutes; then add the fruit, and cook until of a clear amber colour and good consistency.

Peach and Pineapple Chips.

6 lb. prepared peaches.
2 lb. pineapple.
6 lb. sugar.

Skin and stone the peaches and cut into chips, not too large. Skin the pineapple, being careful to remove the eyes and core, then cut it into fine chips. Strew portion of the sugar over the prepared peaches and leave for some hours, or overnight; add pineapple and bring

slowly to boiling heat. Retain that heat until the fruit is cooked, then add the balance of the sugar, and when dissolved the mixture should be given a good sharp boiling until of the desired consistency.

Apricot Conserve.

12 lb. apricots.
1 quart water.
12 lb. sugar.

Select deep-coloured apricots and remove stones; make a syrup of portion of the sugar and the water, and boil for a few moments; then add the prepared fruit, and bring to boiling temperature, and retain that heat for from 15 to 20 minutes, and add the remainder of sugar when boiling heat is again reached. When the conserve is of a good consistency (say 10 minutes or so) convey the mixture into the prepared containers, and seal when set.

If liked, a few blanched kernels may be added to the mixture a short time before finishing off.

Apricot Jam.

4 lb. apricots. 4 lb. sugar.
Juice of 2 lemons. ¾ pint water.

Cook apricots gently with lemon juice and water till quite tender. Take about 8 stones, remove the kernels, blanch these in boiling water, remove skins and add. Add sugar and boil rapidly till of good consistency. Apricot and pineapple jam is made in the same way, one pineapple being used for above quantities, and kernels omitted.

Gooseberry Jam and Conserve.

Conserve—

8 lb. green gooseberries.
4 quarts water.

Boil the berries gently in the water until a slightly pink tint is visible, then measure the whole in a jug or cup, and allow an equal measure of sugar to the bulk, dissolve the sugar, and bring to boiling heat again; then cook rapidly until the mixture jellies when tested. This is a nice jellied product of a rich, clear, red colour.

Jam.—If a thick jam is desired allow less water, and an equal weight of sugar, or three-quarters that amount if preferred.

Carrot and Lemon Marmalade.

Slice 7 large lemons (2½ lb) very thinly, rejecting the pips. Grate a large carrot about 1 lb. weight on a coarse grater. Allow 6 lb. sugar and 6 pints of water. Put lemon, carrot and water straight into the preserving pan without preliminary soaking, with 3 tablespoons of extra lemon juice. Bring slowly to the boil. Simmer for 1 hour. Then add sugar. Stir till dissolved. Boil gently for 1 hour or until the mixture jellies. This quantity makes approximately eleven 1 lb. pots. "Jam" oranges (Poorman, Seville, and Grapefruit) may be used instead of lemons.

Pear and Apple Jam.

2 oz. whole ginger.
4 lb. apples.
1 tablespoon sugar.
4 lb. pears.
8 lb. sugar.
¾ pint water.

Pound the ginger and simmer with the cinnamon till the water is reduced to about half a pint. Add prepared apples and pears and cook till tender. Add sugar and boil rapidly till of a good consistency.

"Galop" Jam.

(Grapefruit, Apple, Lemon, Orange, Pineapple.)

Skin the citrus fruit. Cut up orange, lemon, and grapefruit peel and soak overnight. Next morning cut up apple, pineapple, and pulp of orange, lemon, and grapefruit. Allow a cup of water to each cup of fruit and peel, and put all on to boil. Cook till tender, about 1 hour, then allow a cup of sugar to each cup of the mixture. Dissolve the sugar, boil rapidly till it will set.

Pear and Passionfruit.

4 lb. winter pears.
2 doz. passionfruit.
3½ lb. sugar.

Cut up pears, scoop out passionfruit pulp. Simmer all together till of good colour and consistency.

Note.—Eight of the passionfruit shells can be boiled separately, the insides scooped out, cut up and added.

Rose-hip Puree.

Take 2 lb. rose-hips (orange or red coloured) and 2 pints water. Remove the withered flower ends from the hips and place them with the water in an aluminium saucepan and stew till tender (about 20 minutes with lid on the saucepan). Rub through a sieve and use as required.

Rose-hip Jam.

(Rich in Vitamin C.)

2 pints rose-hip puree, 1 pint apple juice, 2½ lb. sugar.

Wash 2 lb. apples, cut in quarters. Place in an aluminium pan with just enough water to cover. Cook the apples gently until they are tender (about 20 minutes). Pour into a jelly bag and leave to strain overnight. Next day, measure the quantity required and cook the hip puree, apple juice and sugar together until a skin forms on the surface of a test sample poured on to a cold plate. Pour into hot sterilized jars and seal immediately. Store in a cool dark place.

SEVERAL varieties of citrus fruits are available in the season, so that an assortment of marmalades can be prepared. These fruits are at their best for marmalade during the months of June, July, and August.

Certain kinds of oranges, such as Seville, Pomelo or Grape Fruit, Poorman, and others of the sour variety (usually called "jam" oranges) are mostly favoured, though some people prefer to use the sweet kinds, as Navel, Valencia, &c., chiefly because of the mild flavour. All varieties, however, are suitable. It is largely a matter of preference.

The "jam" oranges will give a more attractive product, and also a bigger quantity, than that made from the sweet kinds, because the former will take one quart of water to each pound of fruit and the white pith on these oranges will boil clear, whereas the sweeter varieties will only take one pint of water to each pound of fruit and the white pith will not boil clear.

Lemons also make a very nice marmalade, of a mild flavour. A quart of water may be used for each pound of lemons, but the white pith will not boil clear.

A really good marmalade should be tender in texture, and when cut with a spoon should be just firm enough to retain its shape, and also present a sparkling appearance where cut. It should not be thin enough to be called "syrupy," nor should it be tough. The pieces of peel should not be the least bid hard, and should be evenly distributed throughout the mixture.

A description of various citrus fruits and marmalades is given hereunder:—

Grapefruit.

Fairly large in size and round in shape. The skin is pale to deep yellow in colour and of a fine even texture. As the pectin content of this variety often fluctuates, it is advisable to make a pectin test (as described under "Jam Making"). This fruit is obtainable throughout the year. The marmalade is of a pale clear colour, and, unlike some citrus fruits, the pith will become transparent after boiling. The flavour is good but slightly bitter.

Flat Seville (sometimes called Poorman).

This fruit is also known as Sweet Seville and Smooth Skinned Seville. Medium in size, flat in shape, and of a pale to deep orange colour. The skin is fine to slightly rough in texture. Because of the deep-coloured skin, the marmalade is usually of an attractive appearance and possesses a good flavour. The pith of these oranges will boil clear.

Rough Seville.

Medium in size, round in shape, but slightly flat on top and bottom. Bright orange in colour. It is similar to a mandarin in structure, as the skin will peel easily and the pulp will divide into clear sections. The skin is of rough, uneven texture. Marmalade made from these oranges is golden red in colour, and possesses a good flavour. It would be classed as a sweet marmalade. The pith of Rough Sevilles will become clear after boiling.

Poorman (Pomelo Type).

Round in shape, but slightly flattened at the bottom. The skin is thick and of rough texture, and the pith will become clear after boiling. As the pectin content is not always the same, it is advisable to make a pectin test. Poorman marmalade is usually of a golden reddish colour and of nice flavour, without bitterness.

Citronelle.

Small in size and of round shape. Slightly flattened at one end, it is similar in appearance to a lime. The skin is bright orange in colour and, owing to its rough and uneven construction, will give a frilled appearance in the marmalade. The pith will not become transparent after boiling. The oil cells in the skin are particularly noticeable in this variety, being large and of great number. Citronelle marmalade is of a good colour and possesses a sweet flavour, which is lacking in bitterness.

Limes.

Small in size and round in shape. The skin is yellow to pale orange in colour, and of rough construction, and will not become transparent after boiling. Because of the excess bitterness contained in this variety, the peels may be soaked in two or three changes of fresh cold water before cooking. Marmalade obtained from limes has a good flavour, is a little deeper in colour than grapefruit marmalade, and slightly bitter in taste.

Sweet Orange (Navel, Valencia, &c.).

These oranges produce a marmalade of milder flavour than the jam oranges. It is generally of good colour and lacks bitterness. The pith of sweet oranges does not boil clear. Sweet oranges need only 1 pint of water to the pound of fruit as against 1 quart in the case of other citrus fruits.

Lemons.

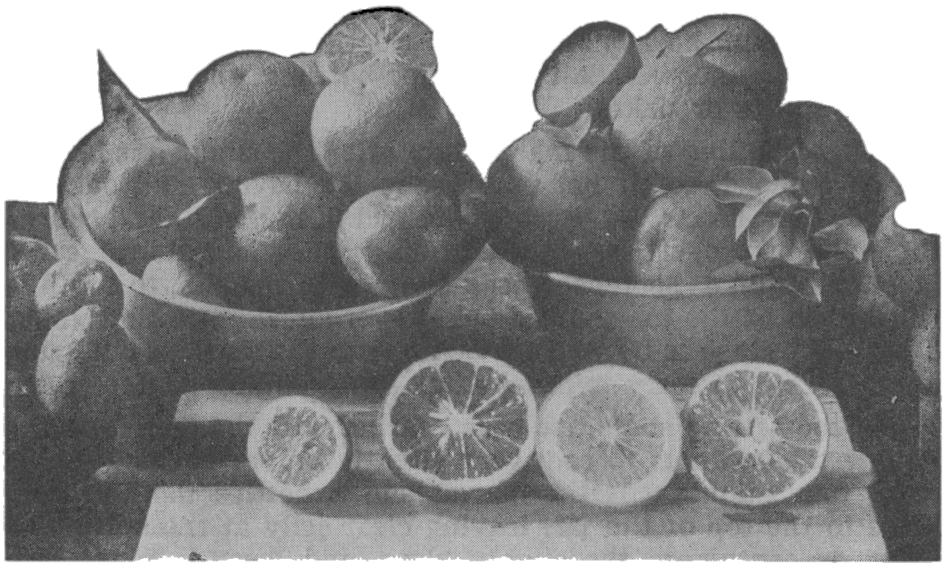
Marmalade from lemons is pale in colour and of a milder flavour than orange marmalade, without being bitter. The pith of lemons does not boil clear.

Utensils.

In making marmalade, the best pan to use is one of medium size, with a broad surface and straight sides, and fitted with a lid. If a lid is not available, an inverted enamel bowl, wooden paste board or tray will serve the purpose. The aluminium pan is very suitable, being light in weight and easy to clean, also the metal conducts the heat rapidly to the top of the pan, allowing the contents to become more easily heated. Any other kind of preserving pan, of course, could be used. For cutting or slicing the oranges, there are different types of small machines and cutters on the market and these simplify the work, although a well-sharpened knife will give equally good results. It is always advisable to wipe frequently the cutting blade either of knife or machine while in use, otherwise the clean skin will become discoloured with the stained juice on the blade.

Selection and Preparation of Fruit.

For any of the marmalades, select fruits even in colour, and free from skin blemishes. Some prefer the deep and others the pale skins. The fruit should be scrubbed, as washing alone will not remove all the dust, and this is one of the causes of a cloudy marmalade.



Different Varieties of Citrus Fruit for Marmalade.

The underlying principles of marmalade making are the same as jam making, but the peel of citrus fruit requires a longer time to cook than the skin of softer fruits, more water has to be added, in order to cook the peel and the boiling has to be continued for a much longer period. The pectin in citrus fruits is to be found in the white inner skin or pith. The acid is present in the juice, and bitterness lies in the little oil cells between the white pith and the skin. If it is desired to remove the bitterness this can be done easily by soaking either the whole orange or the cut peel in two or three changes of fresh cold water for several hours, or overnight. The pectin has to be brought into solution before a jellied marmalade can be made. The more thinly the peel is cut, the more readily this will occur.

Method of Making.

Thoroughly cleanse and weigh the fruit. Halve each orange and remove the centre core or rag which should be rejected as it will not boil clear and spoils the appearance of the finished product by appearing throughout in little thick white lumps. Then quarter the fruit and tear out the pulp, as the dry skin is much easier to shred than the whole orange. Cut the skin as finely as possible and allow to soak overnight in an enamel or earthenware bowl, covering the peel with water.

Next day, add the finely-cut pulp and the given quantity of water, using the water in which the peels have soaked, or discarding it if " bitterness " is not desired. If the " jam " oranges are being used, allow one quart of water to each pound of fruit, and if the sweet kind, use one pint of water only to each pound of fruit. Simmer all together in the preserving pan, with the lid on, until all the peels are cooked, stirring very gently and only occasionally, so that the pieces of shredded peel will not be broken. This should take about three-quarters of an hour.

Then measure by cup and add equal measure of sugar. When the sugar has quite dissolved, boil the mass rapidly without the lid on the pan, skimming if necessary until the setting stage is reached. This may be ascertained by dipping the stirring rod into the mixture, then holding it up horizontally on its side and watching the drops as they fall. If the marmalade is ready for bottling, these drops will fall heavily in sheets or flakes.

Prolonged boiling of the marmalade after the sugar has been added should be avoided, for it not only spoils the flavour and darkens the colour, but also affects the pectin contained in the fruit, and causes loss of the jellying properties. If the boiling mass is watched carefully, and testing begun as soon as it begins to rise in the pan, this will lessen the likelihood of the marmalade being overboiled. The time taken for the " setting " stage to be reached varies with the seasons, but is usually between twenty to forty minutes after rapid boiling has commenced.

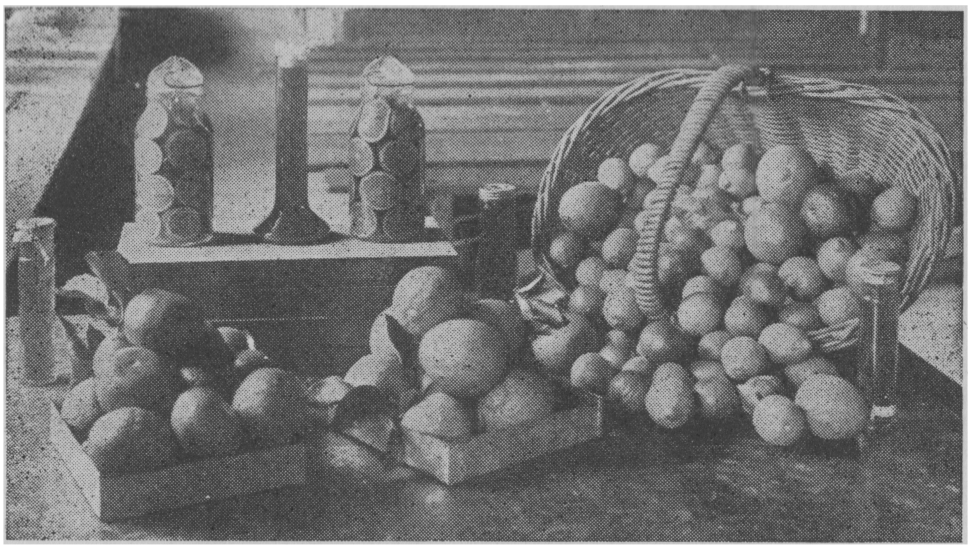
When the setting stage has been reached, lift the pan from the fire and allow the contents to cool very slightly before bottling, for about three or four minutes. If the marmalade is bottled too hot, the pulp will rise to the top of the jar, leaving clear jelly at the bottom. Have the jars or containers thoroughly clean and dry. If glass jars are being used, bind them round with a piece of damp cloth while pouring the hot marmalade into them. Allow them to get quite cold before sealing. If they are sealed while hot, the steam cannot escape, and condenses under the lid.

Marmalade for Exhibition Purposes.

The method for making marmalade for exhibition purposes differs from that previously described, in that the pulp need only be cut roughly and is then tied in a piece of cheese-cloth which is placed in the pan with the finely cut peels, and water. When the peels are cooked and the sugar is to be added, the bag of pulp is removed. In this way the goodness is drawn from the pulp, but the finished product is a clear jelly with the peels evenly distributed throughout.

ORANGE CONSERVE.

A simple and effective method of making either Pomelo or Grape Fruit, or Poorman conserve is to cut each orange into quarters, or eighths (according to size of fruit). Take out the pips without jagging the pulpy portion. Allow a quart of water for each pound of orange. Cook gently until the skins are tender, but not broken. This will probably take about an hour.



The Raw Material and the Finished Product.

Then make the pectin test and add the necessary amount of sugar. After this has completely dissolved the boiling should be very rapid. The mixture will then soon respond to the test for setting, perhaps within fifteen or twenty minutes. As soon as it does, remove the pan from the heat, and allow it to cool off slightly before bottling.

When setting the conserve into the containers see that a fairly even distribution of fruit is in each jar. Seal it when quite cold. It is of importance, when making a conserve of this kind, to aim at keeping the sections of fruit as unbroken as possible. This adds greatly to the appearance.

Another mode of preparation for orange conserve is to cut the oranges into even slices, rejecting the first and last slices (which should be skin only). Then cook the unpeeled slices gently in the water, about one and a half pints to each pound of fruit until tender. Then test for pectin and add the necessary sugar and finish in the same way as that just described for the quartered fruit. Another variation could be made by combining orange, banana and pineapple. This would be made in the same way as the others, the quantities being—

3 lb. jam oranges.
1 lb. (or a little more) of pineapple.
1 lb. of bananas.
3 quarts of water.

The quantity of sugar added would be ascertained by the pectin test (described under "Jam Making").

Marmalade for Kitchen Use.

In some homes, particularly where marmalade is used to any extent, in conjunction with baked or steamed puddings, or in pastry, &c., a very effective and quick way to prepare a quantity for the purpose is to pass the orange skin through the mincer. This saves much time in cutting, and gives an even grain through the mixture, which makes it very suitable for cooking purposes.

When this method is adopted the orange should be first quartered, then the skin and pulp separated. It is the skin only which is passed through the mincer. The juicy part of the orange may be cut up and added, together with one and a half pints of water to each pound of orange used; then make in the usual way. When making this particular kind of marmalade one must be sure that the pieces of skin are quite tender before the sugar is added, otherwise the finished product has an inclination to harden with keeping.

Orange Peel Marmalade.

This recipe is a very economical one, as it utilizes the peels from sweet oranges, which are usually discarded—

2 cups finely-cut peel.
2 pints water.
2 medium lemons.
2¼ lb. sugar.

Soak the peels in water overnight. Next day add the strained lemon juice and simmer, with the lid on the pan, till cooked, then add the sugar. When thoroughly dissolved, boil rapidly till the setting stage is reached. The lemon peel may be cut finely and cooked with the orange peel, or the half pieces may be put in and removed when the sugar is added.

Diabetic Marmalade.

(As advised by Melbourne Public Hospitals.)

1½ lemons.
1 orange (large) peel and pulp.
5 saccharine tablets.
5 oz. water.
¼ oz. gelatine.

Wash the fruit. Peel off the rind thinly. Put fruit, skins, and water into a saucepan and simmer for two hours. Make up the amount of water lost in evaporation. Soak gelatine in a little water, then add to the jam and boil for ten minutes. Just before taking off the fire, add the saccharine tablets. Do not boil after the tablets have been added. This marmalade will not keep for more than a few months.

To Keep Lemons.

Lemons will keep for some time on the tree. If they are picked, they should be packed in a barrel or box lined with sand or sawdust. They should be perfectly dry and free from blemishes. When packed, they should not touch each other or the sides of the box. A layer of dry sand or sawdust should cover the top. Wrapping in tissue paper also helps to keep lemons.

JELLY MAKING

A GOOD and well made fruit jelly is always attractive. Flavour, tenderness, and firmness are the chief qualities to be aimed at when jelly is being made. It should be just firm enough to hold its shape when turned out of the container; also when cut with a spoon or knife, it should retain the angles thus made. It must be clear in colour, and not " syrupy."

Condition of the Fruit.

Fruit is at its best for jellying when barely, or just ripe, or in other words, " firm-ripe." At this stage of maturity, the pectin—a substance which is perhaps one of the most important ingredients required for jelly—is more abundant than when the fruit is past that condition. Over-ripe fruit is unsuitable for jelly, as at this stage the pectin has become pectic acid, which will not form a good set. Under-ripe or immature fruit contains starch, which is insoluble in water and would cause jelly to become cloudy. In jelly making as in jam, pectin, together with acid—which is present in the juice—sugar, and heat, are necessary to produce good jelly, and to obtain a good set, the fruit has to be broken down so that the acid and pectin are dissolved in the water.

Function of Pectin and Acid.

The function of pectin in jelly and jam is to hold the sugar and some water in a tiny little clot or net. If too much sugar is used, the little clot becomes distended and weakened and the jelly will be soft and syrupy. If the sugar is insufficient in quantity, the little net becomes more dense and the jelly is tough or rubber-like. Care must be taken, therefore, to use the correct amount of sugar. The presence of acid is important, as it helps to bring the pectin into solution and brightens the colour of the jelly.

Suitable Varieties of Fruits.

Fruits differ greatly in their pectin and acid content. While many varieties contain enough of both substances to enable the juice to be readily and successfully converted into jelly, others may be rich in pectin, but weak in acidity, and vice versa. Again, some fruits may be deficient, or weak, in both qualities. In these cases, it is only possible to make a good firm jelly, by supplying the necessary ingredients. Sour apples are about the best " assistant " of this kind. In addition to providing the wanted ingredient, their flavour is mild, and will blend to advantage with other fruits, allowing their more pronounced flavour to predominate. Lemons also provide an excellent assistant, as the juice contains acid, while the white pith holds a high percentage of pectin. Other fruits which are rich in pectin, may, of course, be used for the purpose, but most of them when cooked have more colour than the apple and their flavour also is more pronounced. When blending

fruits of this kind, consideration should be given to these points. Fruits which have an acid tart flavour are generally rich in pectin and acid.

Fruits which contain sufficient pectin and acid and therefore will readily make a nice, firm jelly, include such varieties as—

Red, black and white currants,
Loganberries,
Green gooseberries,
Most kinds of plums,
Sour apples,
Quinces,
Sour guavas,
Blackberries,
Most varieties of citrus fruits.

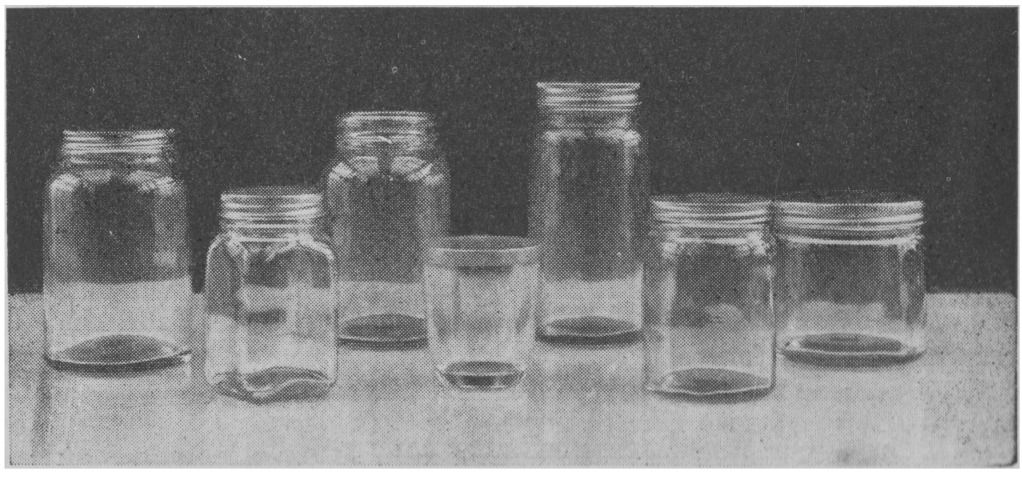
Fruits such as strawberries, cultivated cherries, &c., are deficient in pectin, and so are not suitable, unless assisted.

Nice jellies are also made with combinations, as—

Melon and orange,
Blackberry and apple,
Red currant and raspberry,
And various others.

Method of Making Jelly.

Put the prepared fruit into the pan, with the quantity of water necessary for the variety being used. Some fruits will take a fair amount of water, others very little, and some must be boiled in their own juice only. Boil very gently with the lid on the pan until the fruit is well cooked and the colour partly drawn, then strain first through a colander, where the bulk will be retained, leaving only the juice to be passed through a piece of damp flannel or a flannel jelly bag. This is a quicker method of straining and also results in a slightly clearer jelly. Fruits that are very rich in pectin, such as sour apples, or green quinces, should be extracted a second time. After the first straining has



Some suitable jam and jelly jars.

been made, the pulp should be replaced in the pan with sufficient cold water to barely cover it. Simmer again for three-quarters of an hour. The pulp then should be tipped back into the jelly bag and strained as before. The two extracts should now be mixed together. When the juice has been strained, measure it by cup, return to the pan, bring it almost to the boil and add cup for cup of sugar. Allow the sugar to dissolve, then bring the jelly to boiling point, and boil rapidly without the lid on. Honey may be used instead of sugar, using half quantities of each, but if honey is used altogether, the flavour will predominate over fruit flavours. It should be borne in mind that a good jelly will not be obtained by a slow boil, nor will jelly set correctly until the pectin, acid, sugar, and juice are in the right proportion to one another, and before this can occur, some moisture must be driven off. Skim the jelly, if necessary. It will soon be noticed that as the jelly continues to boil rapidly, the surface will gradually become covered with small bubbles, and afterwards, commence to foam up in the pan. When this occurs it should be tested at once and if it falls from the stirring rod in thick jellied flakes, or sheets (as described under " Jams "), allow to boil for a further few minutes, and then take it from the heat and pour into dry jars or containers, first binding them around with a warm damp cloth. Seal when cold. It is most important to bottle jelly immediately it is cooked, otherwise, if left to cool, the small air bubbles, which are carried in when the jelly is being poured, will be suspended in the mixture and unable to escape. As in jam, a prolonged boiling of the jelly after the sugar has been added, should be avoided, as this causes the setting properties of the pectin to deteriorate.

The Pectin Test.

It is necessary only to take a pectin test (as described under " Jams "), when there is uncertainty as to whether the fruit to be used is suitable for jelly, that is, whether it contains sufficient pectin for setting. When the test is carried out and a good clot is obtained, one cup of sugar may be added to each cup of juice. If the clot is only fair, three-quarters of a cup of sugar may be added, to each cup of juice. If the clot is badly broken up, the pulp should be discarded as unfit for jelly.

Jellies Made Without the Addition of Water.

Good jellies can be made from soft fruits such as berries and currants by warming the fruit, extracting the juice, adding sugar, and bringing the syrup to boiling point. The yield is smaller than is the case when water is added and the jellies are less brilliantly clear, but the flavour is far superior. The allowance of sugar should be from 20 to 24 oz. per pint of extract. The juice should be heated slightly before the sugar is added and special care should be taken to see that all the sugar is dissolved before the jelly is bottled.

Red currant jelly is a good example of this method. It makes a delicious jelly, but the output is small, and unless large ripe juicy fruit is used, only slightly over 3 lb. of jelly will be obtained if using 6 lb. of fruit. Red currant jelly is popular when served with meat, and on this account, it should be piquant, and of firm consistency.

PROBLEMS IN JELLY MAKING.

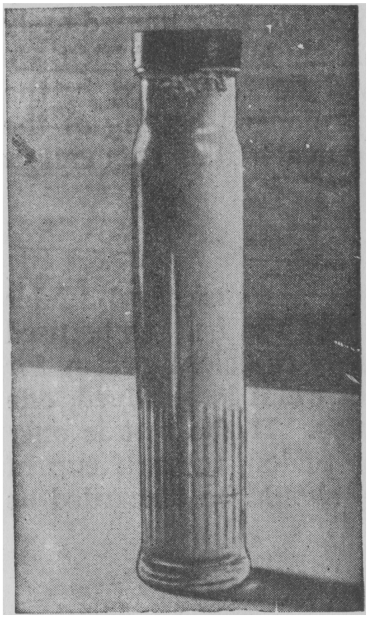
Failures of jellies to set may be due to the following causes:

(1) The use of over-ripe or stale fruit, or poor juice which is lacking in pectin or acid, or both.

(2) Too much sugar.—The pectin in fruit juice is capable of holding a definite amount of sugar in a jellied set. When too much sugar is used, the pectin is broken down, and results in a thick syrup. Sometimes this may be corrected by re-cooking the jelly with an equal amount of fresh juice.

(3) Insufficient cooking.—Jelly is formed only when the concentration of the syrup reaches a certain point. If the cooking is stopped before reaching this point, a thin syrup is the result.

(4) Over cooking.—When jellies are boiled beyond the finishing point, they become thick and syrupy, owing to the breaking down of the pectin. This will also cause cloudiness.



Cloudy jelly.

Cloudy Jellies may be caused by :—

(1) Juice which has not been properly strained before using.

(2) Excess pectin.—If there is a large amount of pectin present in the fruit being used, some of it may not dissolve. This may cause cloudiness. In such cases where the pectin is suspected to be in large quantities, it is advisable to make two extractions.

(3) Use of immature fruits.—When fruits are too under-ripe, they contain starch which does not dissolve, causing a foggy appearance.

(4) When jelly is poured into jars from too great a height, quantities of air are carried in, which form bubbles. These escape with difficulty if the jelly is well made. The edge of the pourer should never be more than one inch above the top of the jar.

Recipes and Blends of Fruits.

It should not be necessary to use the pectin test on the following recipes:—

Red Currant Jelly (1) (without water).

6 lb. red currants.
Sugar.

Clean the fruit and remove stalks. Place in a preserving pan and gently heat until the currants are soft and tender. This will take about 45 minutes. Then mash the fruit, turn it into a scalded jelly bag and strain. Measure the extracted juice and to each pint of juice allow 1½ lb. of sugar. Add the sugar to the juice and stirring constantly, bring the juice and sugar to boiling point. Boil for one minute, then skim the jelly very quickly and pour at once into warm jars. Quick handling is essential, as the concentrating of pectin and acid is so great that the jelly tends to set in the preserving pan.

Red Currant Jelly (2)

4 lb. red currants.

1 pint of water.

Equal measure of sugar.

Cook slowly with the lid on the pan, till the juice is drawn from the fruit; then strain, and add an equal measure of sugar. Remove the lid and finish the cooking by boiling rapidly.

Loganberry Jelly.

6 lb. loganberries.

1 pint of water.

Equal measure of sugar.

Make in manner similar to that described for red currants (see (1)).

Apple Jelly

Crab apples, or any other cooking variety, are suitable. The Rokewood is often preferred on account of its rich colour and flavour. The Dumelow's Seedling is also a favourite, but any sour good cooking apple will give a nice jelly. Wash and wipe the apples, cutting away any defective parts. Slice or quarter them, and level or just cover with water. Boil gently till quite soft (usually about 30 to 45 minutes). Then strain, measure, and add an equal measure of sugar, and boil rapidly till it will respond to test.

Spiced Apple Jelly (suitable for using with cold meats).

Wash the apples, and cut them up roughly, then barely cover with a mixture of three parts of vinegar and one part water.

Cook till quite soft; then strain through a sieve. Put the liquid back into the preserving pan and add to it a little stick of cinnamon and some cloves and whole ginger, according to taste. Boil altogether for about fifteen minutes; then strain, and add three-quarters of a cup of sugar to each cup of liquid. Boil rapidly till it will set when tried.

Some well liked combinations in which tart apple juice will supply the necessary additional pectin are: apple and rhubarb, apple and pineapple, apple and mint, apple and blackberry, and apple and peach.

Apple juice has a mild flavour and lends itself to various combinations in colours and flavour. The following are a few suggestions for attractive combinations:—

Mint Jelly.

4 lb. tart apples.
3 cups strong mint water.
2 cups white vinegar.
Sugar.

Soak a large quantity of fresh mint (about 1 lb.), in 3 cups of boiling water overnight. The next day, cut up the apples and barely cover them with water, and cook gently for one hour, then strain. Add to the apple juice the mint water and the vinegar, strain again, and measure by cup. To each cup of liquid allow one cup of sugar, boil rapidly until the test is given. Green vegetable colouring may be added if desired.

Peach Jelly.

1 cup peach juice.
1 cup of apple juice.

Follow directions for making apple jelly.

Plum Jelly.

Choose sour plums, wash them and put into the preserving pan with just sufficient water to reach the surface of fruit. Boil till thoroughly cooked and the colour drawn (usually about twenty minutes). Then strain and measure; add equal measure of sugar and boil again till it responds to test.

Quince Jelly.

Use only sour juicy quinces. Make as described for plain apple jelly.

Melon and Orange Jelly.

Wipe the melon, and peel or not as preferred. Cut it roughly into blocks, and allow about 10 lb. of melon to 2 lb. of Poorman orange. Put the fruit into the pan with four quarts of water, and cook gently with a lid on the pan, for about three-quarters of an hour. Strain and measure, and add an equal measure of sugar; then boil rapidly till it will respond to test.

Blackberry and Apple.

6 lb. of firm blackberries.
3 lb. of sour apples.
Water to the level of the fruit in the pan.

Make as directed for plain apple jelly.

Loganberry and Kentish Cherry.

3 lb. of loganberries.
3 lb. of Kentish cherries.
1 pint of water.

Make in the same way as loganberry jelly.

Loganberry and Raspberry Jelly.

2 lb. loganberries.
4 lb. firm raspberries.
½ pint water.

Make in the same way as loganberry jelly.

Apple and Quince Jelly.

4 lb. apples.
4 lb. quinces.
6 pints water.

Boil slowly for about an hour, with the lid on the pan, strain, and finish as in the case of apple jelly.

Pineapple and Apple.

2 lb. pineapple.
6 lb. sour apples.
3 pints water.

Make in the same way as apple jelly.

Green Gooseberry Jelly.

Top, tail, and wash the fruit (which should be quite green). For each pound of gooseberries allow one quart of water. If fruit be turning in colour, put only one pint of water, and if fully ripe, just enough to prevent burning. Boil for 1½ hours very slowly, with lid on the pan, then finish in the same way as apple jelly.

Grape Jelly.

To every 6 lb. of sour grapes allow 1 pint of water, boil 20 minutes, and finish as apple jelly.

Other suitable blends are mulberry and Grand Duke plum, apple and mint, rhubarb and apple, red currant and raspberry, lemon and melon.

Raspberry Jelly.

Crush the berries and heat gently to boiling point and continue cooking till tender, about 15 minutes. Strain and finish as for apple jelly. A jelly of bright colour and good flavour can be made by using a combination of apple and raspberry, 4 lb. apples to 1 lb. raspberries. Cook apples till tender before adding the raspberries. Finish as for apple jelly.

NOTE.—Fruit jellies may be sweetened with honey instead of sugar or half honey, half sugar may be used. When using honey solely, the same quantities are used as for sugar.

FRUIT PULPING

PULPED fruit is both economical and useful, while it is a quick method of preserving. No great outlay for the utensils required for the work is necessary.

Pulp may be put up in large or small containers, such as treacle tins and petrol tins, or various sized preserving jars, according to convenience. Sufficient could be stored in petrol tins for making into jam or sauce at a later period. The pulp would then be re-cooked with (in the case of jam) the desired amount of sugar, and (in the case of sauce) the necessary flavourings, and then finished as with fresh fruit.

Preparation.

After peeling, &c., place the fruit in a preserving pan. With soft berry fruits, such as raspberries, loganberries, &c., and such fruits as passion fruit and tomatoes, there is no need to add any water, but harder fruits, like apples, apricots, peaches, &c., need sufficient to keep them from burning. Boil till thoroughly cooked. In the meantime sterilize the containers, also a ladle or jug for dipping out the pulp, and, if required, a wide-mouthed funnel. The articles may be sterilized by putting them in a cool oven and gradually heating it, or by putting them in a large vessel of cold water and bringing the water to the boil. If a platform, as described in the section on the Bottling of Fruit, be at hand, the sterilizing may be done by steam.

When the pulp is ready, place on the table a damp folded towel or cloth, and on this, stand the hot sterilized containers; fill them quickly with the boiling pulp and seal them.

No sugar, salt, or preservatives of any kind are required, and if the work be done properly, the pulp will keep indefinitely. The essential points to be observed in this method of preserving are thorough sterilization and sealing the containers while the contents are at boiling point.

Apples.

Peel, core, and cut into quarters. Add sufficient water to completely cover the bottom of the pan. Boil from 15 to 30 minutes, according to the variety of apple and the colour desired.

Peaches.

Peel, stone, and slice. Add a little water and boil till thoroughly cooked (usually about 20 minutes will suffice).

Pears.

Peel, core, and quarter. Add a little water and boil till well cooked.

Apricots.

Halve the fruit and remove stone. Add a little water, and, if desired, some of the blanched kernels. Boil till well cooked.

Plums.

Same as for apricots.

Quinces.

Same as for apples.

Soft Berry Fruits.

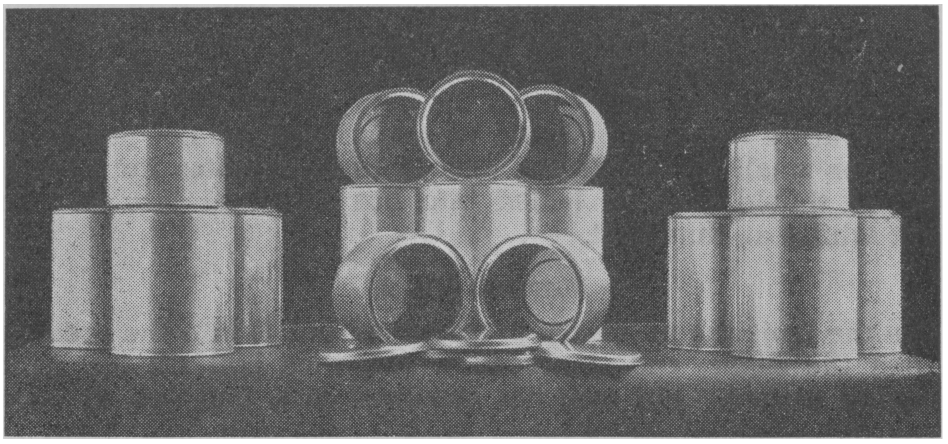
These should be washed quickly without loss of colour in the washing water. Crush a little so as to draw sufficient juice to start the cooking, and boil for 10 minutes. When bottling be sure that any pulp spilt on the top of the jar is carefully wiped off, as a seed left on or under the rubber will prevent the lid from fitting closely. The use of a wide-mouthed funnel will greatly lessen the chances of any pulp being spilled.

Passion Fruit.

Cut the fruit in halves, scrape the pulp into a preserving pan, and then treat as in the case of soft berry fruits.

Tomatoes.

Choose ripe, bright-coloured tomatoes. Firm ones will make a nicer product than watery ones. Wash, and cut away any defective parts. Slice or quarter them. Put into a preserving pan and crush a little so as to draw sufficient juice to prevent burning. Then boil about 15 minutes. If preferred, the tomatoes may be peeled before cooking, or the pulp may be strained before bottling, but if the latter method be chosen, the strained pulp must be brought to boiling heat again before bottling. If desired, a little salt, sugar, or butter may be added, but if the pulp is intended for general uses it would be as well to add no flavouring whatever.



Cans with press-in lids. These are very suitable for pulp.

Pulp for Jam Making.

If the pulp is required for jam, take it from the tin, weigh it, and with hard fruits, reboil it slowly with a small amount of water for 20 minutes. For berry fruits, reboil for 10 minutes. Then make the pectin test, add the necessary sugar and finish the jam by boiling rapidly.

FRUIT PUREE

FRUIT purees are especially suitable for tart fillings, sponge puddings, sweet sauces, &c. They may be used also in the making of gelatine, desserts, confectionery, &c.

There are two methods of cooking puree, and both can be recommended. The first method described is the better for use in gelatine mixtures, or for any uncooked desserts; the second is a quicker process, and is suitable for use in pies, puddings, and in conjunction with other foods that are cooked either at boiling or baking heats.

For either method the fruit should be well ripened, so that it will have a full flavour and colour. Prepare it in whatever way is necessary, by peeling, washing, pitting, or coring. The large fruits should be cut into medium-sized pieces, and the soft berry fruits slightly crushed with the stirring rod after being put into the preserving pan.

Most of the stone and pip fruits require the addition of a little water when putting them on to cook, but the berry or juicy kinds of fruits are usually moist enough without water. The heat will soon soften the fruit, and thus cause the juice to be drawn.

To Sweeten the Puree.

The amount of sugar usually liked, is about ¼-lb. to each pound of fruit, but this may be increased or decreased according to taste, just sufficient being added to make the puree palatable. The sugar is for flavouring purposes only, and does not influence the keeping qualities of the puree in any way.

METHOD No. 1.

The prepared fruit is put into the preserving pan, with or without water, according to the variety being treated, the sugar added, and the whole cooked at a low temperature—160 to 180 deg. The length of time required depends chiefly upon the kind of fruit being treated, but the temperature mentioned should be maintained for not less than 35 minutes for small or soft fruits, and 45 to 55 minutes for hard firm fruits. It should then be ladled into hot sterilized jars and made airtight whilst at that heat.

METHOD No. 2.

Give the fruit the necessary preparation, put it into the preserving pan, add the sugar, and if needed water, then boil till the fruit is thoroughly cooked. Put into hot sterilized jars, and seal at once.

Various combinations of fruits, such as the following, make very palatable purees.

Diamond Plum and Mulberry.

8 lb. diamond plums.
4 lb. ripe mulberries.
3 or 4 lb. sugar.
1 quart water.

Raspberry and Loganberry.

3 lb. raspberries.
3 lb. loganberries.
1½ lb. sugar.

Green Gooseberry.

6 lb. green gooseberries.
1 quart water.
2 lb. sugar.

Ripe Gooseberry.

6 lb. ripe gooseberries.
1 pint water.
1 lb. sugar.

Red Currants and Ripe Gooseberries.

Equal parts of fruit.
Just sufficient water to prevent burning.
Sugar to taste.

Strawberry and Red Currants.

Equal parts of fruit.
No water.
Sugar to taste.

Rhubarb and Apple.

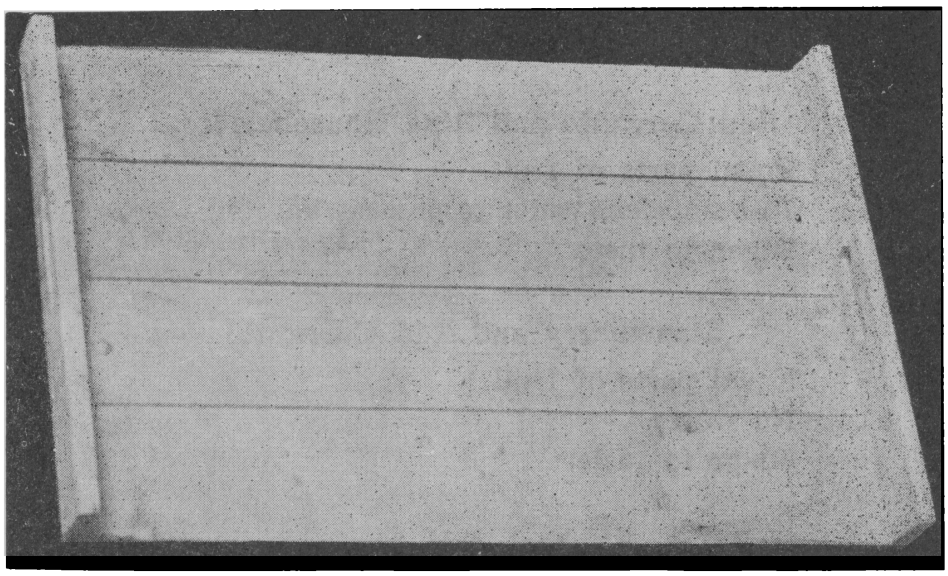
6 lb. of apples.
1 pint water.
3 lb. rhubarb.
Sugar to taste.

FRUIT DRYING

THE drying of fruit or vegetables for home use requires no expensive outlay for utensils, &c.

The general principle involved is the removal by evaporation, without injury to the fruit, of sufficient moisture to ensure its preservation. This moisture may be driven off by exposing the fruit to the sun's rays, the wind also playing a part, or else by artificial heat.

For sun-drying purposes, either the rack system or trays may be used. The former method requires a wooden rack of suitable width and height, with cross-pieces at convenient distances, over each tier of which are stretched sheets of hessian, and the prepared fruit is left thereon until sufficiently dried. This system is generally used, however, when treating fruits in large quantities only.



Tray for Sun-Drying.

Trays of a convenient size for the purpose may be made by joining together four 6-in. x $\frac{1}{2}$-in. lining boards 36 inches long, and nailing to them at each end a cleat 2 feet long by 1 inch wide and 2 inches deep, making the finished tray 36 inches x 24 inches; but, whatever measurements are decided upon, these should, for convenience in handling and stacking, be of uniform size.

Fairly effective drying may be done indoors, either in an oven with the oven door partly open, or preferably by a small "home evaporator." The evaporator should be of a size that will fit on a range or in a fireplace, and it should be fitted with wire trays placed as shelves. It may be either suspended over, stood on, or even hung in the vicinity of the kitchen range where currents of heated air will pass over and about the product, gathering the moisture and carrying it away.

One measuring 24 inches high by 24 inches wide and 18 inches deep should be found a useful size.

The material required for the frame would be—

Four corner uprights, 26 inches x 1½ inch x ⅞ inch.
Four end pieces (two for each end of frame), 18 inches x 1½ inch x ⅞ inch.
Four pieces (two each for back and front), 24 inches x 1½ inch x ⅞ inch.
Sixteen tray rests (eight for each side), 18 inches x 1 inch x 1 inch.

Trays for the above may be made by first making a frame of two pieces of 22 inches x 1 inch x 1 inch and two of 18 inches x 1 inch x 1 inch, and then tacking to this a square of wire guaze, fastening it on more securely with narrow laths.

To suspend the evaporator, a wire may be fastened to each top corner, and the four wires made to meet in a centre ring. If this method be impracticable in any place, the way that convenience dictates may be followed.

If stood on the stove, four supports or feet should be placed underneath the evaporator, so as to lift it high enough to prevent burning.

Preparing Apples and Pears for Drying.

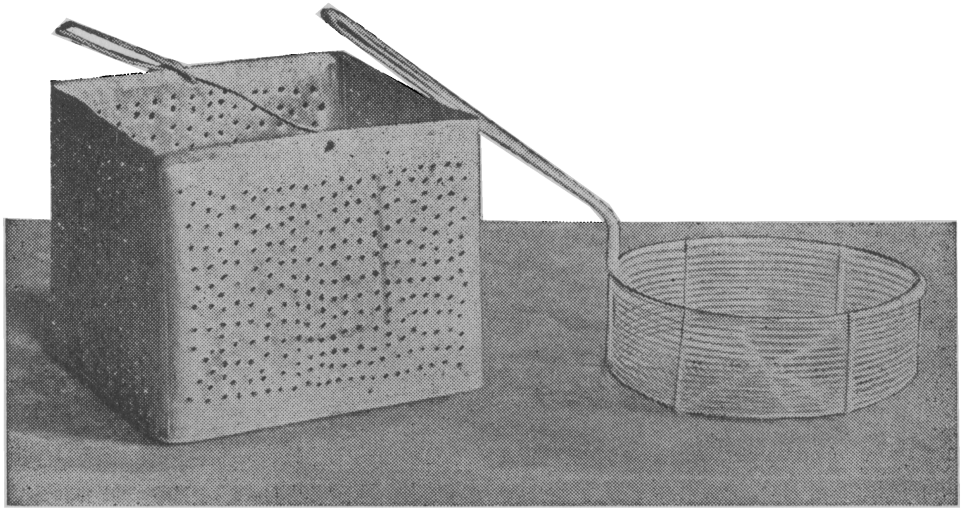
PREPARATION OF THE PRODUCT FOR DRYING.

Some varieties that are dried whole, including grapes, prunes, figs, &c., are usually dipped for a few seconds in a boiling solution of lye, which cuts the bloom and causes minute cracks to open on the surface of the skin, through which the moisture escapes more readily than if the fruit were not dipped, thus hastening the drying process.

Dipping the Fruit.—The lye solution is made by dissolving 1 lb. of caustic soda in 16 to 20 gallons of water, the strength varying according to the kind of fruit under treatment. If used too strong, or the fruit left too long in the solution, the skin will probaly burst, making

the finished product less presentable, and liable to sugar more quickly. It would be advisable for the operator to experiment with several small lots by immersing the first for from ten to fifteen seconds, and if, on examination, the skin remains intact, fresh specimens should be steeped for three or four seconds longer, or, if overdone, then for a few seconds less. The cracks or checks in the skin should be no larger than would be just visible to the naked eye. The fruit should be rinsed by passing it through a clear cold-water bath after it comes from the dipping solution.

An ordinary household washing copper would serve as a dipping vat. A wire basket or perforated cage will be necessary to hold the fruit during the dipping operation; a large billy or petrol tin cut down and well perforated over both bottom and sides, and fitted with a strong wire handle, will serve the purpose; the perforation should be done from the inside, with a hammer and a large nail, so as to avoid any roughness which will tear the flesh of the fruit.



Utensils suitable for dipping fruit in the lye solution.

SULPHURING.

All light-coloured fruits have a tendency during the drying process to darken in colour. To prevent this and make the product more attractive they are usually sulphured. This process is carried out by placing the trays of fruit in a box of a length and width to admit the trays being slipped in or out readily, and of a height to suit requirements, on the sides of which should be fastened cleats 3 or 4 inches apart for tray rests. The fruit is then placed in the cabinet and enveloped with fumes of the burning sulphur.

The amount of sulphur used is approximately in the proportion of 1 lb. to every 100 cubic feet, but depending somewhat on the length of process. The sulphur should be put in a suitable receptacle, placed on the floor of the box, and ignited by a few live coals or other method, the box or cabinet then closed, and the fruits subjected to the fumes for a length of time depending upon the kind of fruit being treated. When sufficiently sulphured, it is then ready for drying.

Sulphured fruits appear to dry more quickly and with a better texture than the unsulphured, and the process is also thought to give them a certain amount of protection against injury from insects while exposed for drying.

If the fruit is for home use, this operation may be omitted altogether, but if for commercial purposes it will be necessary, as the sulphured product is very much more attractive than the unsulphured.

A Home Dryer.

DRYING.

The length of time required for drying varies with the different fruits, sizes of pieces, temperature, weather conditions, and other influences. If there be any dew or rain, the trays should be stacked one over another, and a cover thrown over the whole as a protection from dampness.

All fruit should be equally dried before packing. To effect this it should be removed from the trays and placed in bins or heaps, so that the overdried specimens may absorb surplus moisture from those no quite dry enough, and thus condition or equalize the whole.

Apricots.

Apricots for drying should be ripe, but not " mushy." They may be dried whole, but usually are cut in halves. The fruit is placed on the drying trays with the cut sides uppermost, and then put in the sulphur-box without unnecessary delay, and sulphured. The length of time allowed for sulphuring differs widely; some give four or five hours, while others allow fruit to remain all night, during which time the fumes gradually die out, therefore, anything from one to twelve hours may be given.

Some determine the time for removing the fruit from the sulphur cabinet by its appearance; this is often known by the depression, from whence the stone has been removed, filling with juice. The trays should then be carefully removed and placed in a suitable position for drying. If they are raised a little from the ground they will dry better than if they are placed flat on the grass.

The period required for drying will largely depend on weather conditions, &c., varying from two and a half to six days, in a few cases even longer.

All pieces of fruit on the one tray do not dry alike, and some of the pieces must be collected from the trays sooner than others. Each tray must be examined occasionally, and those pieces sufficiently dry, removed. The appearance and texture of the fruit will be a guide as to whether the drying process has continued long enough. When sufficiently dry, the pieces should be somewhat pliable, yet, when twisted about between the fingers, have no sign of juice nor be in any way mushy. When that stage is reached, they are ready to be " conditioned."

Apples.

Any variety of apple may be used, though cooking apples are best and white-fleshed sorts, when dried, are the most presentable. They should be fully matured, but not " floury " or " mealy." The apples are usually peeled, cored, and sliced, but are sometimes dried whole with only the core removed. During preparation, the peeled fruit is sometimes dropped into a weak salt solution (about two tablespoonsful of salt to 1 gallon of water) to prevent its discolouring, but it should not be allowed to remain too long in this bath, certainly not after the required quantity is prepared.

It is then sulphured for a few minutes and dried until the slices or rings are soft and velvety to the touch, and of a pliable texture. Another way of judging is to take a handful of the slices, close the hand tightly, pressing the fruit firmly into a ball in the palm of the hand, and if sufficiently dry, the rings or slices should be springy enough to separate at once on being released; they will then be ready for removal.

Pears.

The " Williams' Bon Chretien " pears are a good drying variety. The fruit may be skinned or not; it is usually halved, spread on trays with the cut side uppermost, and well sulphured, after which the pieces will be quite soft and require careful handling. They are then ready for drying. When sufficiently dry, they should be of a somewhat doughy, stretchy texture, if worked between the fingers.

Peaches.

The yellow, firm-fleshed, free-stone varieties are the best for drying. They are treated in almost the same way as apricots, and the finished article is also tested in the same manner. Peaches, however, usually require a longer time to dry than apricots.

Prunes.

Dark-coloured plums do not need sulphuring, but light-coloured varieties are improved by it. They are selected when fully ripe, and treated with a soda dip as before described, then spread to dry. When finished they should have a shrunken skin, and the texture should be firm, springy, and pliable if pressed in the hand.

Prunes are improved if glossed. This is done by immersing them (immediately before packing) for a few seconds in a boiling, but weak solution of either glycerine and water, 1 part glycerine to 16 parts water, or sugar and water, and then throwing them in a heap, preferably in a dark place, and covering with a cloth for, say, 24 hours, by which time the outside moisture is absorbed. They will then be ready for packing.

Grapes.

Lexias (*Pudding Raisins*).—Ripe " Gordo " grapes are usually selected. They should be immersed for a few seconds in the soda solution and then spread on trays for drying.

Sultanas.

Sultanas are treated in a similar way to Lexias.

Currants.

The bunches should be cut from the vine. They do not require to be dipped. They are placed on the drying trays and exposed to a moderate temperature for drying; where the bunches are thick at the shoulders, the branchlets forming this portion should be opened or spread, so as to avoid dense masses. Where convenient, it is preferable to expose currants to a gentle hot wind without the full glare of the strong sunlight.

Muscatel or Dessert Raisins.

The grapes should not be removed from the stem. They must not be dipped. They should be carefully handled during the picking, drying, and packing, as the retention of the colour and bloom upon the fruit is of importance.

Cherries.

Cherries may also be dried and used as a substitute for raisins. They are sometimes dried whole, but more frequently stoned.

Figs.

Select ripe figs, the riper they are the better will be the flavour. Steep in lye solution as described for raisins, then sulphur and dry. When dried, to prevent their becoming unduly hard, and also to destroy insect life, it is considered advisable, before packing, to dip them for several seconds in a boiling solution of rock-salt and water (about 3 oz. of salt to a gallon of water), and then place in a heap for a few hours. The salt also has the advantage of counteracting the excessive sweetness of the fig. If tasted soon after steeping, the product may have a salty taste, but in a few days this will be quite unnoticeable.

The Drying of Herbs.

Many housewives draw a supply of culinary herbs from their own garden, where they require very little attention in their cultivation. A small plot of ground would probably yield sufficient to meet requirements right through the year if in times of plenty the surplus were preserved by drying, when they could be stored away in corked bottles, either separately or in a mixed form, and would be of supreme service in the kitchen when the fresh ones were not obtainable.

To dry the herbs for culinary use, they should be gathered on a dry day, and after the morning dew has disappeared. They usually are gathered just before the flowering stage. Cleanse them quickly and remove any decayed leaves, and spread on a clean sieve or tray of wire mesh, or on stretched cotton cloth, such as cheesecloth. They may then be dried in an airy room or in a cool oven. If dried in the oven, spread them in layers on the oven shelf, and leave the door slightly open. The heat must not be too great, but should be sufficient to dry quickly, so that the colour and flavour will be protected. The temperature should be raised gradually from about 110 deg. F. to 130 deg. F. The leaves should afterwards be separated from the stalks and passed through a sieve, when they are ready for storing in clean, dry bottles. which should be kept corked, as herbs lose their aroma and strength by exposure. Each variety may be bottled separately, or may be blended, in suitable mixtures, with or without the addition of spices, and are then in readiness for use when required. They will be found serviceable for the purpose of imparting a nice flavour to savoury pies, pasties, brawn, and forcemeats; some varieties being suitable for soups; others for seasonings, gravies, mince, stuffings, &c.

Herb Mixtures.

It is sometimes an advantage to have a mixture of herbs ready for use when required. One or two nice blends are as follow:—

½ oz. lemon thyme.
½ oz. marjoram.
½ oz. basil.
½ oz. savory.
¼ teaspoon grated nutmeg.
⅛ teaspoon cayenne.
2 bay leaves.
1 blade mace.

2 teaspoonsful each of thyme, summer savory, marjoram, and parsley.
1 teaspoonful grated lemon rind.
1 teaspoonful celery seed.
3 bay leaves.

¼ oz. dried thyme leaves.
¼ oz. marjoram.
¼ oz. savory.
About ⅛ oz. of cayenne pepper.
½ oz. nutmeg.
½ oz. ground cloves.

Equal parts of crushed dried celery leaves and dried parsley will make a nice mixture for soups and certain forcemeats.

Pound together and, when reduced to a powder, pass through a sieve, bottle and keep corked as herbs.

Parsley for Garnishing.—Parsley may be preserved by drying in the same manner as other herbs. Another method is to wash it free from sand, and, after removing the coarser stalks, dip into boiling water which is slightly salted. Just scald in this way for a couple of moments, drain and shake it free from water, then dry as other herbs. This method of drying is usually adopted when the parsley is needed for garnishing purposes. It should, of course, be stored in corked bottles, so that the small sprays of parsley may be used as desired. When wanted for use, just soak in warm water for a few moments.

Preparing herbs for drying.

VARIOUS FRUIT DISHES

Apricot Shortbread.

MAKE some round shortbread biscuits slightly larger than the apricots; drain the syrup from a bottle of apricots and place one apricot on the centre of each round, and decorate the top with stiffly-whipped cream passed through a suitable icing tube.

Hot Day Dessert.

6 rounds of sponge cake.
6 halves of bottled yellow peaches.
Ice-cream.
A little red currant or other red jelly.

Cut the rounds of cake with a scone-cutter, and slightly moisten each with a little of the syrup from the fruit, and place one half peach on each round, with the cut side uppermost, fill the hollow centre with ice-cream and decorate with a tiny bit of red jelly. If ice-cream is not available, make rosettes of whipped cream instead.

Apple Tart.

About ½ pint of apple pulp.
1 good raw apple.
1 oz. butter.
3 oz. sugar.
½ lemon, rind and juice.
Few cloves.
1 tablespoonful biscuit or cake crumbs.
Short crust.

Boil the apple pulp with the butter, sugar, and lemon and cloves. Stir constantly until the mixture is thick, and then turn it out to cool. Meanwhile prepare an open tart with short crust pastry, prick the pastry and sprinkle into it the cake crumbs, then the apple pulp, and a top layer of thinly-sliced apple. Allow each slice to slightly overlap the previous one, so that the pulp may be covered with the thinly-sliced apple. Bake in a good oven until nicely browned and well done.

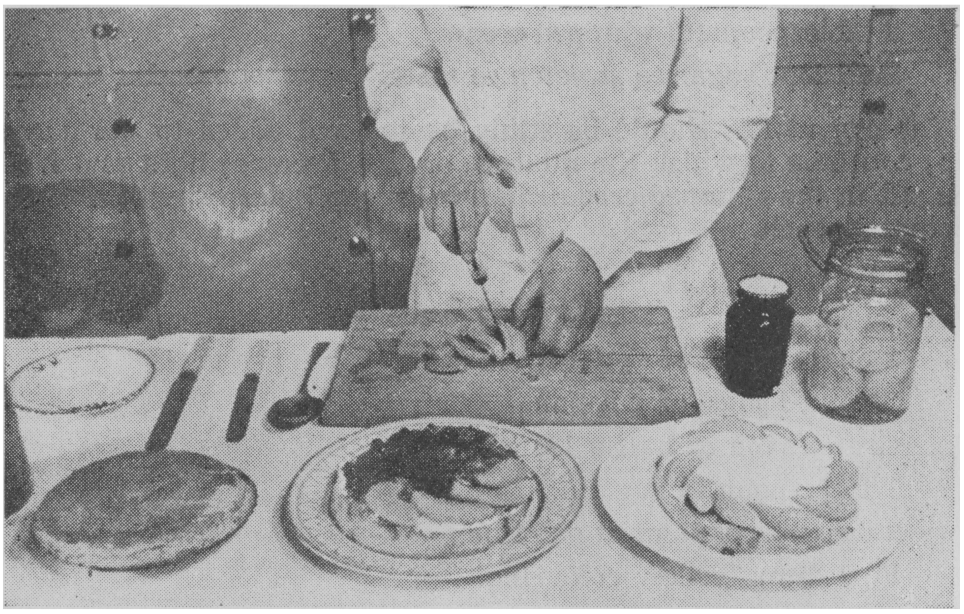
Allow the tart to stand for a few moments after removing it from the oven, then remove the ring in which it was baked, and serve hot.

Orange Delight.

1 quart bottle of sliced oranges.
1 saltspoon of tartaric acid.
Enough water to make the syrup measure 3 cups liquid in all also a little extra sugar is required.
3 dessertspoonsful gelatine.

Warm the liquid in an enamel-lined saucepan, and add the gelatine, tartaric acid, and sugar, and when dissolved strain through muslin. Meanwhile arrange the circles of sliced oranges around the wall of a smooth mould; pour in a little of the liquid jelly, and allow it to set so

as to keep them in position; afterwards gently fill up the mould with the remainder of the cold liquid jelly and set it in the ice chest or other cool place. When required for use turn it out, and decorate with stiffly-whipped cream passed through an icing tube.



Bottled Fruit and Fruit Pulp are excellent for Puddings.

Peach Slices and Milk Gelatine.

Open one jar of preserved peaches; place a layer of them evenly in the bottom of a round mould and set in place with a little jelly. In addition, the following ingredients are required:—

1 pint milk .
½ oz. gelatine.
Flavouring.
2 or 3 oz. sugar.

Put milk into a lined saucepan; add the gelatine and sugar and flavouring; when quite dissolved pour into the mould very gently on top of the jellied peaches.

Apple Souffle.

1 cupful apple pulp.
2 oz. castor sugar.
½ oz. butter.
Juice of 1 lemon, and a little of the grated rind of lemon.
2 eggs.

Pass the apple pulp through a sieve; put the sugar, lemon and egg yolks into a medium-sized basin, and beat them together until of a creamy consistency; then add the apple pulp and mix all together. Beat the egg white stiffly and stir them lightly into the mixture. Put into paper cases or a pie-dish and bake till firm to the touch. Sprinkle with castor sugar before serving.

Apple Whip.

1 small jar apple pulp.

1 tablespoonful lemon juice.

2 egg whites.

2 tablespoonsful whipped cream.

Sufficient sugar to sweeten to taste.

The egg whites should be stiffly beaten and added to the puree or pulp; continue to whisk the mixture until it becomes light and frothy; then stir in the whipped cream. Serve in small glasses with a wafer to accompany each.

Apricot Relish.

1 quart bottle of apricots.

Strained juice of 1 lemon.

Grated rind of half a lemon.

1 tablespoonful sugar.

2 dessertspoonsful of gelatine.

Few drops yellow colouring.

Open the bottle of apricots and drain syrup into an enamel-lined saucepan, and warm it (do not boil); add the lemon juice, sugar and gelatine; stir until dissolved; then add two or three drops of yellow colouring.

Strain this liquid jelly through a muslin bag. Now carefully arrange the apricots in the bottom of a flat mould, and pour in sufficient of the liquid jelly just to cover them; place the mould in the ice chest or some really cool place, and when just set pour over the fruit the remainder of the liquid jelly. If the liquid jelly has already begun to set, warm it slightly so that it will become quite liquid, and when cold pour it carefully over the layer already in the mould. When set quite firm turn it out in the usual way and serve with whipped cream.

Bottled Plum Pudding.

Any good plum pudding mixture may be cooked in preserving jars and stored for future use.

Mix the ingredients in the usual way; then pack the mixture into straight-sided preserving jars, first placing a round of buttered paper inside on the bottom of the jar. Leave sufficient space in the jars for the mixture to swell during the cooking. The lids should rest lightly on the jars, and boiling heat should be maintained for several hours, according to the richness of the mixture. When thoroughly cooked, put on rubber rings and make the jars airtight. To reheat for use, release the sealing levers and stand the jar on a damp folded cloth in the sterilizer and allow to become heated right through (about half hour after water boils is sufficient).

Apricot Sauce for Steamed Puddings.

1 cup apricot pulp.
Grated rind and juice of half a lemon.
1 tablespoon castor sugar.
1½ gills water.
1 oz. cornflour.
Few drops yellow colouring.
Almond flavouring if desired.

Method of Making.—Heat the pulp in a saucepan, add the cornflour previously mixed smoothly with a little syrup, and cook together for a few moments, stirring the mixture until it boils; then add the sugar, lemon juice, rind, and colouring.

Dried Fruits may be used for Cake and Biscuit Decoration.

Apricot Puff.

½ cup apricot pulp.
3 oz. sugar.
Little water.
4 egg whites.

Put the sugar into a saucepan with just enough water to moisten it, and boil it to the degree known as "crack," or about 300°; then add to it the apricot pulp and mix well. Meanwhile beat the egg whites stiffly, and pour the apricot mixture slowly on to them, continuing to stir.

Grease and sprinkle a pie-dish with sugar, then put in the mixture, which should only half fill the dish, so as to allow for rising. Bake in moderate oven for 15 to 20 minutes, or until firm to the touch; sprinkle with castor or coloured sugar and serve.

Apple Puree and Rice.

1½ cups apple pulp.

1½ cups cooked rice.

½ cup sugar (or to taste).

Juice of one lemon.

About 6 cloves.

Nutmeg.

Cake crumbs.

1 tablespoon butter.

Heat the apple pulp in an enamel-lined saucepan and add the sugar, lemon juice and cloves. When sugar is dissolved, put the mixture into an earthenware dish previously greased; then a layer of cooked rice, smooth the surface, and sprinkle liberally with cake crumbs and a little grated nutmeg, and lastly distribute small pieces of butter over the surface. Bake in a good oven till nicely browned and well heated through. Serve hot, with a little cream.

Prunes in Batter.

Soak some dried plums for twelve hours or longer; drain and dry surface moisture from the prunes; remove the stone carefully, replacing it by a blanched almond or a little almond paste. Dip each prepared prune into a good frying batter, and fry in deep fat until of a golden brown colour; place them to drain on kitchen paper and afterwards sprinkle them with castor sugar to which a sprinkling of cinnamon has been added.

Tomato Forcemeat.

1 cupful tomato pulp.

1 oz. butter.

2 teaspoons finely-chopped onion.

1 cup breadcrumbs.

1 egg.

Season with pepper and salt.

Method.—Melt butter in saucepan; cook the onion in it without browning; add tomato pulp, cook together for 8 or 10 minutes; then allow to cool. Mix in the breadcrumbs and egg and add seasoning.

Tomato Gravy.

(For serving with cutlets, rissoles, or sausages.)

Heat 1 tablespoon of butter in a saucepan with a little flour (about 1 dessertspoonful); brown it, stirring well so as to prevent burning. Then add 1 cupful of strained tomato pulp; continue to stir until the mixture boils and is of a smooth consistency.

Sliced Tomatoes Baked.

1 bottle of sliced tomatoes.
Breadcrumbs.
Mustard.
Pepper and salt.
Butter.

Open a bottle of sliced tomatoes and drain them well. Brush each slice lightly with a little mustard which has been moistened with the tomato liquid. Season the breadcrumbs with pepper and salt and sprinkle the slices well; put them in a baking dish with small pieces of butter dotted over the surface, and bake till heated through and nicely browned. Serve very hot.

Bottled whole tomatoes may be used if desired.

Fried Tomato Slices.

1 bottle sliced tomatoes or fresh tomato slices.
1 egg.
1 teaspoonful of tomato liquid.
Pepper and salt.
Breadcrumbs.
Little plain flour.
Frying dripping.

Drain the slices thoroughly, and dredge each one with a little plain flour; mix the teaspoon of tomato liquid with the egg and dip the slices quickly into it, then into the crumbs, coating them entirely; fry at once in very hot dripping or butter until nicely browned, then lift out carefully and place them to drain on kitchen paper; then transfer them to a hot dish and garnish with a little parsley.

Tomatoes treated in this manner are nice for serving with fried bacon, fish, or cutlets.

Tomato Au Gratin.

1 quart bottle of tomato slices or tomato pulp strained.
2 cups breadcrumbs.
2 tablespoonfuls of grated cheese.
1 tablespoonful of butter.
Salt and pepper.

Put a layer of tomato slices, or tomato pulp, on the bottom of a fireproof dish; season with salt and pepper; then put a layer of breadcrumbs and a sprinkling of grated cheese. Repeat in alternate layers until all is used up. Place the butter in small pieces about the top and bake in a moderate oven. If preferred, a little grated onion and finely-chopped parsley may be mixed with the tomatoes and the cheese omitted.

Bottled Tomato Soup.

For every 6 lb. firm, ripe tomatoes, allow—

1 pint water.
2 small onions.
Pepper and salt to taste.
1 tablespoon sugar.
1 level teaspoon celery seed.
¼ teaspoon carb. soda.
3 teaspoons cornflour.

Put all the ingredients except the soda and cornflour into a preserving pan, and boil gently till tomatoes are well pulped; then rub through a sieve or screen, so as to keep out the skins and seeds. Then return this strained pulp to the pan; add the soda, and when boiling again, add the cornflour (mixed with a little cold water).

Allow the soup to boil for a few minutes to cook the cornflour. Then pour into hot sterilized jars, and immediately seal.

It is essential that the soup should be sealed airtight while it is at, or very near, boiling heat.

Passion Fruit Snow.

1 pint water.
2 lemons, strain juice.
3 oz. sugar.
½ oz. gelatine.
Preserved passion fruit.

Dissolve the gelatine and sugar in the water, and while slightly warm whip it with an ordinary wire whisk until white and snowy; then pile it up in a rocky pyramid and allow to set firm. Serve with some preserved passion fruit and a little plain thin cream.

Preserved Pears with Coffee Jelly.

1 jar bottled Williams' pears.
½ pint syrup (from the pears).
½ oz. gelatine.
½ pint strong coffee.
1 tablespoonful sugar.
Few drops yellow colouring.
Few drops vanilla, or ginger flavouring.

Drain the syrup from pears and strain it; make it warm; add to it half the amount of gelatine, and if not sweet enough add a little more sugar. When cold add the flavouring, strain again and put into a tall mould, previously rinsed in cold water, then place in the ice-chest to set.

Meanwhile make half a pint of strong coffee and add to it the remainder of the gelatine and one tablespoonful sugar. Rinse a border mould with cold water and when the coffee is cold pour it into the mould and place in ice-chest to set. When required for use turn out both jellies, placing the tall clear one inside the brown border of coffee jelly; then place the white pears around, and mask the top with whipped cream passed through an icing tube. If preferred, the clear jelly may be chopped and placed in a pyramid in centre of the brown border.

Orange Dainty.

1 bottle oranges.

1 pint milk.

½ oz. gelatine.

3 oz. sugar.

2 egg whites.

Method.—Put the milk, sugar, and gelatine into an enamel-lined saucepan; warm them slightly, and when thoroughly dissolved, strain and allow to cool. Beat the egg whites stiffly and add them to the milk, then beat or whip the mixture until quite stiff. Pile it high in a suitable bowl or plate, placing the well-drained slices of oranges around the base in an upright position. Make a jelly by putting a dessertspoonful of gelatine to a pint of the syrup from which the oranges were drained, with the addition of the juice of one lemon. When set, chop the jelly and put a band of this round the oranges.

Passion Fruit—For Serving with Ice-cream, Salads, Hot-weather Drinks, &c.

Select freshly-picked, fully-matured fruit. They should have a good pronounced flavour, sufficiently acid to bear the addition of a little sugar or syrup.

Method of Treatment.—Remove the fruit from the shells, tone up the flavour with a little thick syrup, being careful not to over-sweeten it.

Heat the mixture in a double boiler to a temperature of 140 deg. F., then remove the inner pan at once and allow the contents to become cold.

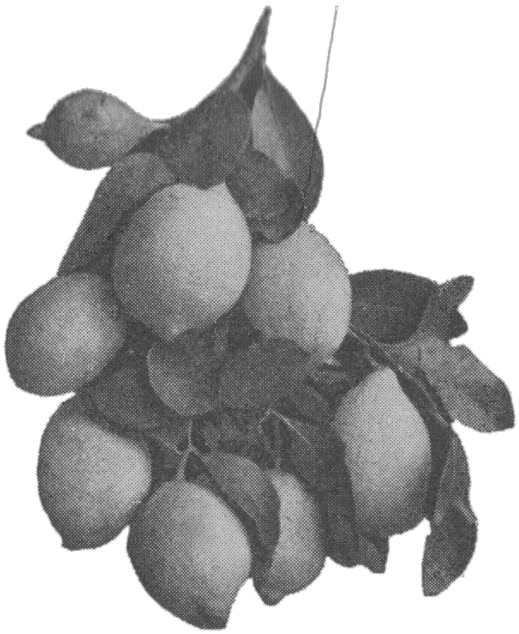
In order to remove the seeds from the pulp, gently beat it with an egg whisk, or table fork (as you would beat eggs for a custard), then pass through an open-mesh sieve, so as to retain the loosened seeds. Pour the passion fruit into preserving jars of a convenient size (the small preserving jars are the most useful size for home use), put the lids lightly on the jars, and place jars on the little platform in the sterilizer. Bring the water to a degree of 160 deg. F., and allow the jars to remain at that temperature for 30 minutes, before sealing them.

They are then ready to be lifted out on to a wet folded tea-towel, and should be allowed to cool.

The best method to prepare the syrup for sweetening purposes is to boil together two parts of sugar and one part water until a thick clear syrup forms, and allow it to become cold before mixing it with the passion fruit.

If preferred, the product may be put up without any sweetening agent. The treatment would be the same as described above, except that the syrup should be omitted.

CANDYING CITRUS PEELS



WHEN candying lemon peel, it is advisable to select fruit free from skin blemishes of any kind; a scabby or damaged skin will spoil the appearance of the finished product.

Wash or scrub the lemons thoroughly clean; then cut them through from end to end, using a very sharp knife, so that the cut edges will not be roughened.

The juice should be extracted from the halved fruit. If a cone squeezer be used for the purpose, care should be taken to see that the tip or point of the squeezer does not penetrate or bruise the skin. The juice may also be preserved, and used for summer drinks and for many culinary purposes. It is, in fact, equally as valuable as the peel.

The lemon skins, or caps, should be immersed in a solution of salt water for the purpose of extracting some of the bitterness from the skin. To make the solution allow ½ lb. salt to each quart of water, and stir until dissolved. A sufficient quantity of brine should be made to completely cover the peels. When the salt is thoroughly dissolved, pour the liquid over the caps, and allow them to remain in it for several days—about a week or longer if convenient.

After salting they should be rinsed thoroughly to remove the salt, either by running water or by several changes of water. The freshened peels or caps should then be put into the preserving pan, covered with fresh water, and boiled gently until tender. Try them now and again with a cooking needle; this should penetrate them easily, but they should not on any account be allowed to become soft enough to break or fall out of shape. When they are sufficiently boiled, the pan should be removed from the heat. The peels should be lifted out, and drained on a sieve, and allowed to become cold.

Sometimes the insides of the peels are cleansed by removing the membrane and soft white pith which lines the inside of the skins; if this is desired, it is best done at this stage, as the pulp has then become soft with the boiling. Gently scrape the caps with a spoon until clean, and then rinse them so as to remove any little particles that may be adhering to them.

The peels are then ready to be put into a steeping syrup, which should be kept clean and clear. If the caps are packed one inside the other loosely, they will fit into a smaller container than would be required if they were put in without packing.

There are two ways of syruping the peels. The first is to make the syrup of full strength. To do this, add 16 lb. of sugar to a gallon of water, which should then be boiled for five minutes; pour it over the peels, and allow them to steep in it for an indefinite period, but at least seven days.

The other method is to commence with a weak syrup made by boiling for five minutes 4 lb. of sugar to each gallon of water. Allow the liquid to cool to about 200 deg. F., and then pour it over the peels. Leave them to steep in this for about 24 hours. At the end of that time the syrup will be a little weaker, the peels having absorbed a certain amount of sugar from it; therefore, it will require strengthening by the addition of more sugar. To do this, the syrup should be drained off and brought to the boil, and 3 lb. of sugar added for each gallon of liquid. Boil for a few minutes, and pour again (while hot) over the peels. If the syrup is skimmed during each boiling it helps to keep it clear. The syrup will need strengthening in this way on three successive days; allow the same amount of sugar each time. After the third strengthening, let the peels remain in the syrup for three or four days; then add another 3 lb. of sugar for each gallon of syrup. Therefore, an interval of one day only should be allowed between each of the first three additions of sugar; then an interval of three or four days when the final 3 lb. is added. The total quantity of sugar used will be 16 lb. to each gallon of water. By adopting the gradual process, the peel becomes permeated evenly throughout, and is generally a little more satisfactory than that put directly into the full strength syrup, though the use of the full strength liquid is a much quicker process.

Candying Lemon and Orange Peel.

(Making the Syrup.)

The lemon peels must not be allowed to float while steeping in the syrup, but must be completely immersed in the syrup the whole time.

The peel may be left in the final syrup as long as convenient, and portions may be taken just when needed. It is quite as serviceable for general use when in this state as when dried and candied.

HOW TO CANDY THE PEEL.

Remove the peels from the syrup, and place them on a sieve to drain. When well drained, place them on trays, and dry them in a cool oven. Be very careful not to scorch them. When the surface moisture has evaporated, they are ready for the candying. To make a candying or dipping syrup, allow 2 lb. of sugar to each pint of water, and boil to 232 deg. F. Immediately that temperature is reached, remove the pan from the fire and stir till a very slight cloudiness appears through the syrup. The operator should be careful to see that the liquid is not over-stirred.

If the pan of dipping syrup could be set inside a vessel of hot water during the dipping, the work would be more satisfactory, as an even temperature should be maintained throughout the process.

When the syrup shows a cloudy appearance, quickly dip the dried peels in it; then place them to drain with the hollow side uppermost, so that the syrup will drain into the hollow and form the piece of candy which we usually see in the finished product. When the syrup has set, the peels should be clear, firm, and nicely coated with candy.

Orange Peel.

Either the sweet or the bitter orange peel may be preserved in a somewhat similar manner to that described for lemon peel, with this difference, that the orange peel should be boiled for a less time than is necessary with the lemon. Another difference is that the Seville orange requires a longer immersion in the salt solution than does the lemon, it should be left in it till the bitterness of the peel is sufficiently reduced.

Citron Peel.

The citron also makes a nice candied peel. It is usually pricked through several times on each cap, so as to assist the sugar permeation. The treatment otherwise is practically the same as for the lemon.

If any peels be broken or damaged during the candying process, they should not be wasted, but may be shredded and stored for use when wanted. A mixture of orange, lemon, and citron peel makes a better flavouring than does the shredded peel of any one of the varieties.

Quick Method Candied Peel.

Grapefruit.—Cover with water and boil till tender. Pour off the water, cover with cold water, and boil half-an-hour. Repeat this process five times or until the peel has lost its excessive bitterness. Make a syrup of 1 lb. of sugar to 1 pint of water, bring to the boil, add the peel, and stand overnight. Next day boil the peel in the syrup to the " jelly stage," 222 deg. F. Drain the peel, roll in powdered sugar, and dry.

Orange.—Use thick-skinned oranges. Make as for grapefruit, but boil with the cold water two or three times instead of five or six times.

Lemon.—As for orange. Use thick-skinned lemons.

CRYSTALLIZED, CANDIED, AND GLAZED FRUITS

ALMOST any variety of fruit may be preserved by these methods, but those generally favoured are cherries, apricots, plums, pears, small oranges, kumquats, pineapple, and, to a lesser extent, quinces, melon, peaches, and gooseberries. The fruit should be thoroughly saturated with a very strong syrup as this is the secret of its keeping, but if this is done too quickly, the fruit will shrivel and become hard and tough; therefore a better result will be obtained by a gradual process. The use of a saccharometer, or float gauge, for testing the density of syrups would be an advantage.

The fruit is softened by boiling, so that it will more readily absorb the syrup, and be less likely to shrivel. If the fruit is soft and overripe it will break up in the boiling and have a very poor appearance when finished; so choose nice firm-ripe fruit, and if possible with unblemished skins. Three parts cook, as too much cooking will, of course, break the fruit, and too little will result in too slow a penetration of sugar, resulting in a darkness in colour.

When three parts cooked, allow it to drain, and make a steeping syrup by boiling ½ lb. sugar to each pint of water. The water in which the fruit was boiled may be strained and used for this purpose. It takes about a pint of water for each pound of fruit. Pour this hot syrup over the drained fruit and allow it to steep for 24 hours, then drain it off, bring the syrup to the boil, and add 6 oz. of sugar for each pint of water used at the commencement. Boil it for about five minutes and then pour, hot, over the fruit. Again strengthen the syrup in this way on three successive days, skimming each time if necessary; then let the fruit steep for three or four days after the final addition. That makes a total of 2 lb. sugar to a pint of water. During this steeping the fruit must be kept well under the syrup. After the final steeping the fruit is ready for drying. To drain lift the fruit out carefully, and put it on a sieve or wire tray over a plate; and when well drained, put the tray in a very cool oven (about 115 deg. or 120 deg. F.) to dry. When evenly dried, free from stickiness and easy to handle, it may be stored away ready for use, but if a better finish is desired, it may be crystallized, glazed or candied by further processing.

Crystallizing.

To crystallize fruit, make a fresh syrup by boiling 3 lb. sugar to each pint of water till it reaches 220 deg. or 222 deg. F., that is " strong thread " or " pearl " degree. Now draw the pan aside and allow the syrup to remain undisturbed till it has cooled off a little, then pour it over the fruit which should be placed in single layers

on wire trays or shallow dishes and covered with a damp cloth. Leave undisturbed until a thin crust of sugar forms on the top (about 10 or 12 hours). The syrup should then be poured off carefully and the fruit well drained, and put in a very cool oven until dry. It will then be covered with clear crystals.

Glazed Fruit.

Make fresh syrup with 1 lb. sugar to ¼ pint water boiled to 300 deg. F. (hard crack degree). Thoroughly dissolve the sugar before boiling heat is reached. When the right degree is attained, put a little in a cup, keeping the bulk covered and in a warm place. Dip the fruit into the syrup in the cup, then place on a wire tray or plate to drain. As soon as the syrup in the cup shows a cloudiness discard it, and take a fresh supply from the pan. When all is dipped put it to dry in a cool oven, and when finished it should have a clear glossy or glazed surface.

TO CANDY FRUIT.

Prepare fresh syrup with 1 lb. sugar to ½ pint of water and boil to 230 deg. F. (feather degree), then remove the pan from the fire and stir the syrup till a very slight cloudiness appears. Be careful not to overdo this, or it will become coarse-grained. Keep the pan of syrup in a vessel of hot water so that the temperature will be maintained. Dip the fruit in and out as quickly as possible, and place on a tray to drain, then put in a very cool oven till the candy is set.

Any syrup that remains after the steeping of fruits may be used in different ways, such as sweetening puddings and sauces, making fruit gelatines, for sweets, or it may take the place of sugar in pickles, chutneys, &c.

Cherries.—Light-coloured cherries should be selected for this purpose, and should be stoned as carefully as possible so as to avoid tearing the flesh unnecessarily. They are immersed in boiling water for a few minutes, drained, and then put into the steeping syrup as described. Cherries are sometimes artificially coloured by adding a few drops of the desired colouring matter to the steeping syrup.

Pineapple.—Peel and cut the fruit into blocks or slices and treat as described.

Apricots should be stoned either by cutting down one side, or making a small slit underneath and pushing the stone from the other end with a skewer or knitting needle. The fruit is then dipped in boiling water for a few minutes, or steamed, and then put into the steeping syrup.

Plums are treated in the same way as apricots.

Melon should be peeled, seeded, and cut into blocks or slices, and three parts cooked, then treated in the same way as pears.

Figs.—Select the figs before they are fully ripe. Flavour the steeping syrup with ginger, and simmer the fruit in this until nearly cooked. Then proceed as described.

Small Green Oranges.—Very small oranges should be chosen They should be soaked in brine (¼ lb. salt to 1 pint water) for a few days, then rinsed, and boiled in fresh water to which a pinch of carbonate of soda has been added. Simmer for about 20 minutes, then drain and put into the steeping syrup. Finish as described for other fruits.

Gooseberries.—Deep red fruit should be topped and tailed, then put straight into the steeping syrup.

Pears.—The Williams' Bon Chretien and the winter pears may be crystallized. When using the winter varieties they should be peeled, but the stems left. They are then very gently boiled in the steeping syrup each day so as to gain the deep red colour. When using the Williams' or other soft white pears, they are partially cooked only, before being steeped. The syrup may be flavoured with ginger if desired.

Quinces should be peeled and cut into sections and treated as winter pears.

Peaches should be peeled, stoned, and cut into desired sizes, then treated in a similar manner to apricots.

Paw-paw.—Peel, slice, cook very gently until tender. Treat as described.

Crystallized Angelica.—The hollow stalks are gathered in the early spring. The leaves are removed and the stalks are cut in pieces, then covered with a boiling salt solution (one tablespoon of salt to two quarts water) and soaked ten to fifteen minutes, drained and rinsed then drained again, then dropped into boiling water and boiled gently for five minutes. Continue by following the method given for using the steeping and crystallizing syrups. A few drops of green colouring may be added to the steeping syrup.

Celery stems may be coloured and used as angelica.

APART from their pleasing appearance and delightful flavour, fruit juices are of value in the diet on account of their vitamin content, the minerals they contain, and the fact that their reaction in the body is alkaline.

Unfortunately, colour, flavour, and vitamin content of most juices are gradually lost when juices are preserved by home methods and stored for any length of time. This loss depends on the temperature during pasteurization, and length of time stored. The addition of sugar to citrus and berry fruits retards these undesirable changes.

Fruits suitable for juice are—apples, paw-paws, passion fruit, berry fruits, prunes, pineapples, tomatoes, grapes, currants. It is interesting to note that black currant juice is being advocated for babies on account of its high vitamin content.

Juice can be expressed by a crusher or extractor for hard fruits like apples, quinces, or pineapples Where dealing with large quantities of apples or grapes a press is used. A greater quantity of juice is obtained from berry fruits if they are heated over hot water until the juice runs freely, and then strained through a cloth. Citrus juice is extracted on a cone extractor, but it is not strained. Tomatoes are heated to boiling point, boiled fast for about ten minutes, then strained. Fruit juices should be put in glass, earthenware, or aluminium—*never in galvanized ware.*

Apple, grape, and tomato juice require no sugar, though salt may be added to the latter. For other fruits the amounts required are as shown—

Berry fruits—2 cups sugar to 3 cups juice.

Orange and grapefruit—1 cup sugar to 3 cups juice.

Lemons—1¼ cups sugar to 1 cup juice.

Plums—1 cup sugar to 2 cups juice.

The sugar should be dissolved before bottling.

Any glass bottle with a well-fitting cork may be used; crown top bottles are suitable if a crown sealer is available. The bottles should be quite clean, and the corks should be boiled in a saucepan with a lid on for ten minutes.

The bottles are filled to about 1½ inches from the top, and a funnel is useful for this purpose. The cork is placed on or tied down, and the bottles placed on a stand in a vessel for pasteurizing. A kerosene tin is useful, as the vessel should be high enough to hold the bottles.

Water is poured in to reach up to the neck of the bottles and this water should be of about the same temperature as the juice when the bottles are placed in it. The lid is put on the vessel, and the temperature is raised to 165° F., and held between 165° F. and 180° F. for 35 minutes.

The bottles are then removed from the pasteurizer, their corks pressed in, and the heads of the bottles dipped in melted paraffin wax or sealing wax. They are placed on a damp cloth and allowed to cool. If crown seals are used, they may be clamped on about five minutes before removing from the pasteurizer. When cool the seals should be examined. If necessary, the bottles should be re-dipped, and stored in a cool, dark place.

In serving juices and syrups they may be used in ices, trifles, milk shakes, sherbets, gelatine sweets, sundaes, or used as beverages.

Fruit Punch—

4 cups fruit juice.
½ cup lemon juice.
1 cup sugar (omit if juice is sweetened).
4 cups water.

Dissolve sugar in the water; add the fruit juices and mix. Cracked ice, orange or lemon slices, or sprigs of mint may be added when serving.

Raspberry Vinegar.

(This quantity will make 3½ pints.)

Place 2 lb. of sound ripe raspberries in a jar. Mash the fruit and pour over a pint of white, distilled vinegar. Stir well and stand for three or four days. Strain, and to each pint of extract, add 14 oz. sugar. Put into saucepan, stir until all sugar is dissolved, boil for 10 minutes. Skim well. Strain and pour into hot bottles and cork. Keep three months before using.

Pineapple Juice.

(from skins and cores.)

Pass the skins through a fruit extractor, then strain juice and pour it into a clean bottle to within 1 inch of the top. Sterilize as for other juices.

SYRUP.

To each cup of extracted juice add one cup of sugar. Warm the juice until the sugar is dissolved. Bottle and sterilize as directed.

The skins of one medium-sized pineapple will yield one cup of juice.

FRUIT BUTTERS

Fruit butters are similar to jams, but are of a stiffer consistency and a more even texture. As luncheon spreads for sandwiches or biscuits they are very useful to the housewife. Apples form the foundation for many butters, but plums, grapes, pears, and tomatoes are used also.

There are two methods of making fruit butters. The first is the puree method, which is explained hereunder:—

Prepare small containers—pots or small jars. Weigh or measure the fruit. Wash and cut up roughly. Cook gently with a little fruit juice or water—just sufficient to prevent burning—until tender. Press through a sieve. Simmer gently until the sputtering begins. Add the sugar—generally half a cup of sugar to a cup of puree—and cook until the test is given. To test, place a little fruit on a plate and stand to cool. If liquid does not separate out, it is done. Another test of the consistency is that it can be heaped on a spoon. Fill jars, seal and label.

By the use of the above method a wide range of butters can be made by combining different fruits and flavours. Generally speaking, 3 lb. of fruit is sufficient to make up at one time.

Apple Butter.—Prepare as above, but sugar is not generally needed. Cinnamon or lemon may be used as a flavour.

Apple and Raisin, or Apple and Sultana.—As above. Use ½ lb. raisins or sultanas to 1½ lb. apple, and juice and rind of a lemon.

Apple and Date.—4 oz. dates to 1 lb. apples and juice of 2 lemons —sugar not necessary.

Apple and Grape.—Use equal quantities of grapes and apples.

Apple and Banana.—Proportion of 1 apple, 1 banana, ½ lemon.

Apple and Tomato.—1 lb. apples, 1 lb. tomatoes, rind of ½ orange.

Apple and Pear.—1 lb. apples, 1 lb. pears, 1 teaspoonful cinnamon, 1 teaspoonful ground ginger.

Apple and Mint.—1 lb. apples, 2 cups chopped mint leaves, ¼ cup vinegar.

Apple and Parsley.—1 lb. apples, 2 cups parsley (chopped), juice of 2 lemons.

Raisin Butter.—Cook 5 lb. raisins until they will go through a colander. Add ½ teaspoonful each cinnamon, cloves, all spice, nutmeg, and 2 cups sugar. Cook till the test is given.

Orange Butter.—Wash fruit, remove stems, seeds, and blemishes, and slice. Cover with water and cook till tender (about 1½ hours). Mash through a sieve. Add ½ lb. sugar to 1 lb. fruit. Cook till the test is given.

Plum Butter.—Vinegar may be used in place of water.

Pear Butter.—Lemon juice, ginger or cinnamon to taste, may be added. Brown sugar may be used in place of white.

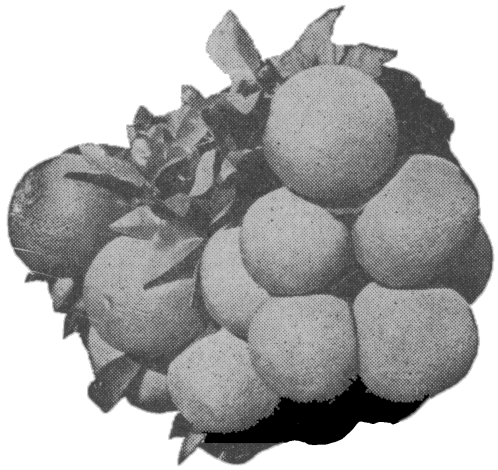
The second method of making butters is used for lemons, passion fruit, dried apricots, and bananas, and requires the addition of eggs and butter. Butter and sugar are creamed, beaten eggs added, then fruit juice or mashed fruit. The mixture is double boiled till thick.

Lemon Butter.—2 oz. butter, ¼ pint water, ¼ pint strained lemon juice, 3 eggs, 1 lb. sugar, rind of 2 lemons.

Passionfruit Butter.—2 oz. butter, pulp of 8 passionfruit, 1 lb sugar, 3 eggs, 4 tablespoons lemon juice, 4 tablespoons water.

Banana Butter.—4 bananas, juice of 2 lemons, 2 oz. butter, 1¼ cups sugar, 3 eggs.

Peanut Butter.—Roast the peanuts in a moderate oven for about half an hour, stirring occasionally so that they will not burn. Remove red skins and grind in a mincing machine or mill. When smooth and soft, press into jars and seal. Salt to taste may be added during the first mincing.



AROMATIZED VINEGARS

AROMATIZED Vinegars are useful preparations to have ready prepared, and may be used to advantage in various dressings which are to be served with salads, and for fish sauces, &c., and by their use a new flavour is easily obtainable to a sauce or dressing.

The tarragon, celery, and onion vinegars are much appreciated.

Tarragon Vinegar.—Vinegar is aromatized easily with tarragon by allowing one cupful of the herb to steep in a quart of vinegar for ten to twelve days, then strain the liquid through a clean fine muslin strainer, bottle and cork for future use.

Shallot Vinegar.—Remove the skins and chop the shallots finely, cover them with vinegar, and infuse for a few days, shake the bottle occasionally; afterwards strain and bottle the vinegar, keeping it well corked. Finely chopped Spanish onion may be used in place of the shallots, if preferred.

Onion Vinegar.—To ½ cup chopped onion. 1 quart vinegar. 1 teaspoon salt. 2 teaspoons sugar.

Celery Vinegar.—Take about 1 lb. chopped celery. ½ oz. celery seed (crushed). 1 teaspoon salt. 2 teaspoons sugar. 1 quart vinegar.

The vinegar is heated with the celery seed, salt, and sugar, and poured over the chopped celery and allowed to cool, then put into a large bottle. Shake daily for ten to fourteen days, then strain and bottle, and cork.

Horseradish Vinegar.—Take about 1 breakfastcupful of grated horseradish (if desired it may be passed through a mincer). 1 rounded tablespoon white sugar. 1 quart cider or white wine vinegar.

Scald the vinegar and pour over the horseradish, allow to steep for seven to ten days, strain and bottle.

Vinegar Making.

Vinegar can be made from apples, grapes, peaches, oranges, or pears. Cull fruit from the orchard may be used; also undersized or marked fruit.

Use ripe, clean fruit. Extract the juice by crushing or pressing. Allow the juice to stand a day or two to let the sediment sink to the bottom. Cover with a double layer of cheesecloth. If a hydrometer (sugar) is available test for sugar content. The reading should be 12·5 or over. This testing is not necessary for vinegar for home consumption, although juice with less than that amount will not give a very strong vinegar.

Siphon or drain off into clean crocks or barrels for fermentation, filling only ¾ full to leave space for fermentation. Cover with cloth.

For quick fermentation a little compressed yeast cake may be mixed with the juice and added, or a little fermenting juice may be added. This addition of a starter is not essential, but it hastens the process.

Stand in a warm room; about 80° F., while fermentation is in progress. This process may take from six to fourteen days. It is important to allow time for the fermentation to be completed. Stir daily during this period.

Strain off the clear portion into clean crocks for ascetic fermentation. If allowed to stand, the juice will gradually turn into vinegar, but the process is hastened by the addition of a vinegar starter, one part of a good strong vinegar being added to four parts of juice.

Cover the crock with a lid to allow the process to continue in the dark. After from three to eight days a scum begins to form. This scum must not be interfered with and must remain on the surface. A raft of sticks is sometimes used if the scum-mother of vinegar begins to sink.

Allow vinegar to stand three to six months until it is sufficiently strong. Strain through flannel, bottle, pasteurize at 160° F., seal and store in a cool dark place.

PRESERVING VEGETABLES

Bottling is Not Recommended.

IT has been a common world-wide practice for many years for food preservation experts to recommend the home preservation of vegetables by means of a process of one or more sterilizations at the temperature of boiling water followed by bottling. Investigations in Great Britain and the United States of America have shown however that this process is not perfectly safe because it is possible that the vegetables may be infected with an organism present in some soils, which is not destroyed by sterilization at the temperature of boiling water, and which, in the bottles, can produce a deadly poison so powerful that the slightest taste of infected contents is sufficient to cause death. In view of this risk housewives are advised not to use this method of preserving vegetables, except in the case of tomatoes and rhubarb, which may be safely bottled in that way.

To kill the organism, and its resistant spores, it is necessary to process for 30 minutes or more in a pressure cooker at 240° F., which requires a 10 lb. pressure of steam to maintain. This is the process used in the commercial canning of vegetables and may be used in the home if a pressure cooker is available. Experts state that, provided home bottled vegetables are boiled for 20 minutes immediately prior to use, they would be rendered safe for immediate consumption, but in view of the possibility that housewives may taste the vegetables before this process is completed, or use them uncooked in salads, the safest plan is not to preserve vegetables by bottling.

Don't take the risk of bottling vegetables. Preserve them with safety by salting, drying or pickling.

The above warning does not apply to home bottling of fruits, tomatoes or rhubarb. This is quite safe and is recommended.

VEGETABLE DRYING

IN the dried form, vegetables are much less bulky than in the fresh state, therefore they require less room for storing, and cheaper containers may be used. Most varieties can be dried, but the most suitable are beans, peas, carrots, parsnips, mushrooms, pumpkins, turnips, &c.

The drying process is very simple; it may be done in a cool oven, a home-made dryer, as illustrated on page 57, or out in the sun. One should be careful to use only young fresh vegetables. If allowed to become old and tough they will remain tough when soaked and cooked after drying.

The preparation of the vegetables is the same as when preparing them for immediate use. They are then blanched by immersing in boiling water from 3 to 5 minutes according to the variety, age, and size to which they are cut. Plunge into cold water immediately for about half a minute. Remove the surface moisture by shaking them in a dry towel, then spread them on the trays or oven shelves. If the trays are of wire they should be covered with a piece of cheesecloth. If drying them in the oven, let it be at a temperature of about 110 deg. to 115 deg. F. until they are slightly dry, which will take about two hours. The oven could then be allowed to get a little hotter, say 145 deg. to 155 deg. F. Keep the oven door slightly open all the time to allow the damp air to escape. Stir the vegetables about occasionally to ensure even drying. Be careful not to let them scorch or both colour and flavour will be spoiled. When thoroughly dry, take them out and leave in a box or tin overnight. If, when examined next morning there is any sign of dampness, return them to the oven for complete drying. If stored away with any sign of dampness they will become mouldy.

Most vegetables are very brittle when first taken from the oven and will break easily, therefore handle them carefully or they will have a very broken unattractive appearance when served. After a day or two they become limp and pliable, and are more easily handled without breaking. It is necessary to store them in insect-proof containers, such as screw-top jars or tins with tight-fitting lids. If the vegetables have been dried in the sun it is advisable to put them in the oven for a little while, at a temperature of about 170 deg. F., in order to destroy any insect eggs that might be on them.

French Beans.

These should be washed, strung and cut as desired, or if preferred they can be left whole. Half a teaspoonful of carbonate of soda to a gallon of water should be put into the blanching water to improve the colour. Immerse them in this boiling solution for 3, 4 or 5 minutes according to the age of the beans. Then plunge them immediately into cold water and dry as described previously. When sufficiently dry, the beans should snap easily.

Butter Beans.

Treat in the same way as French beans, but omit the soda.

Peas.

Choose young peas, shell them, and treat as for French beans.

Carrots, Parsnips, Turnips.

Wash thoroughly, clean, scrape, and cut as preferred. Blanch in boiling water for 4 or 5 minutes and proceed as described. To test when dry, cut a piece and press between thumb and finger, and if sufficiently dry no moisture should exude.

Soup Vegetables.

Any vegetables suitable for soup may be prepared in the ordinary way, then finely cut, grated, or shredded, and dried. If desired they may be mixed for convenience in storing.

Celery.

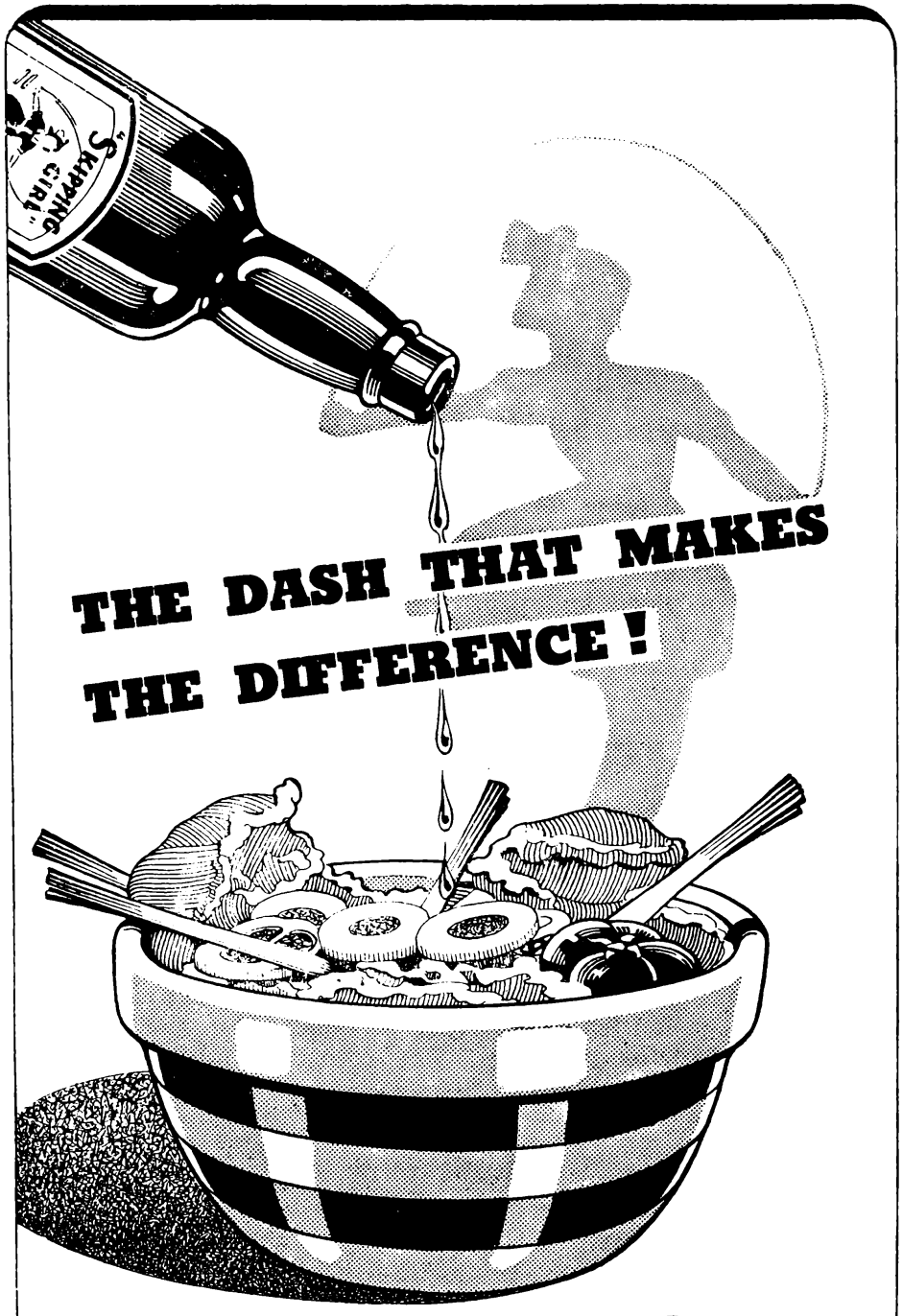
The coarse outside stalks and dark-green leaves of celery are quite suitable, when dried, for flavouring clear soups, but they should be very carefully washed before drying, to remove all dust and grit. The tender stalks and light-green leaves can also be dried, of course, but they are exceptionally nice for bottling. The celery should be blanched in boiling water for 4 or 5 minutes before drying.

Mushrooms.

The mushrooms may be dried in a similar manner to fruit, and stored for use when required. Brush the mushroom free from dirt, or peel if preferred; those having fair-sized flaps are the best for drying. Place them on trays or racks without blanching. Mushrooms, of course, shrink a great deal in the process, but they make a delicious flavouring for gravies and soups, &c., or the dried mushrooms may be cooked in the usual way, if first soaked for a little while. They are excellent for serving with grills.

Pumpkin.

Pumpkin should be peeled and then cut in thin slices, which should be steamed for 5 minutes. The slices are then dried in the usual way.



THE DASH THAT MAKES
THE DIFFERENCE !

Skipping Girl

Pure Malt VINEGAR

Brewed from Pure Malt and Grain by
THE VINEGAR CO. OF AUST., ABBOTSFORD, VICTORIA

VARIOUS pickles, chutneys, sauces, herbs, &c., are suitable for home use, but they should not be the rare luxury they are to-day. Many sauces, &c., are inexpensive, and are very useful to season various dishes and make the bill of fare attractive.

There are many vegetables, fruit, and herbs which are suitable alone or in combination for the making of pickles, chutneys, &c.

The pickles in which the flavour of vinegar predominates are usually spoken of as " sour pickles," and when the sugar or sweetness is more prominent they are called " sweet pickles," or " spiced fruit." These all make excellent preserves, and are usable in several ways. " Mustard pickles " are also a favourite with many, and " chutney " is a preserve well worthy of consideration. Tomato sauce, and other thick sauces so much appreciated, may be made with different flavourings, many of which give satisfactory results. The " liquid " sauces include mushroom ketchup, Worcester, &c., while there are quite a number of the aromatized vinegars and dried herbs which will be found very appetizing.

Vinegar.

Vinegar, with or without the addition of spices or sugar, is used as a temporary preservative in the making of pickles and sauces. Spices, salt, and sugar have somewhat the same effect as vinegar on bacteria, though in a different degree; but they are valuable, apart from their qualities as preservatives, for the flavour they impart.

Vinegar also has the power of softening the cellulose of green or undeveloped vegetables and fruits, thus rendering some unpromising substances acceptable as condimental foods.

Only the best vinegar should be used for pickling. When making clear pickles white vinegar gives the better appearance, but in all pickling malt vinegar is preferable because it gives a better flavour.

When adding spices to vinegar, they should be tied in a muslin bag, added to the vinegar, which then should be brought just to boiling point. It is important to have the lid on the saucepan during this process, otherwise most of the flavour is lost. The vinegar should then be removed from the stove and allowed to stand for two hours or longer. The spice bag should be lifted out, when the vinegar will be ready for use. Vinegar should not be boiled as it contains acetic acid, which is volatile and when boiled loses its strength.

When pickling vegetables such as cabbage, onions, &c., which should be crisp when ready to eat, placing them in cold vinegar will give the better results, while hot vinegar is better for the softer types of pickles, such as walnuts and plums.

Spices and Flavouring Agents.

The following classification of a few commonly known spices and flavouring agents which are frequently used in pickling may be helpful:—

Mace. Cloves. Cinnamon.	Protective.
Mustard. Nutmeg. Pimento or allspice.	Partly or semi-protective, and are valuable for the flavour they impart.
Ginger. Pepper. Cayenne.	To give flavour to the food and to aid digestion.

Turmeric is added to give colour.

Salt is employed as a preservative, and also as a seasoning.

Horseradish is thought to retard the growth of mould.

Vinegar has also the power of softening the cellulose of green or undeveloped vegetables and fruits, thus rendering some unpromising substances acceptable as condimental foods.

Vegetables commonly used in pickling are cabbage, tomatoes, cucumber, beets, carrots, beans, cauliflower, onion, &c., also green or unripe fruit and nuts which are tender enough to absorb the vinegar.

The preliminary preparation of various vegetables differs in some ways. Some are more satisfactory for pickling if first soaked in salted water to extract acrid flavours, others may be lightly sprinkled with dry salt overnight, while some are simply parboiled in salted water. By salting for some hours beforehand in this way, a portion of the water contained in the vegetable is extracted from the tissues, which are then prepared to become absorbed with the spiced vinegar.

A list of various vegetables and their method for salting before being placed in vinegar is given hereunder:—

Green tomatoes.—Soaked in brine (4 oz. salt to 1 pint water) for two or three days.

Cabbage.—Shredded and sprinkled with salt and left for 24 hours.

Beetroot.—Three-quarters cooked in salted water.

Gherkins.—Packed in salt for two days.

Cucumbers.—Packed in salt for two days.

Cauliflower.—Broken into sprays and either sprinkled with salt overnight or parboiled for five minutes in salted water.

Walnuts.—Soaked in brine (2 lb. salt to 1 gallon water) for one week.

Carrots.—Parboiled in salted water.

Onions.—Soaked in brine (4 oz. salt to 1 pint water) for two or three days.

Beans.—Packed in salt.

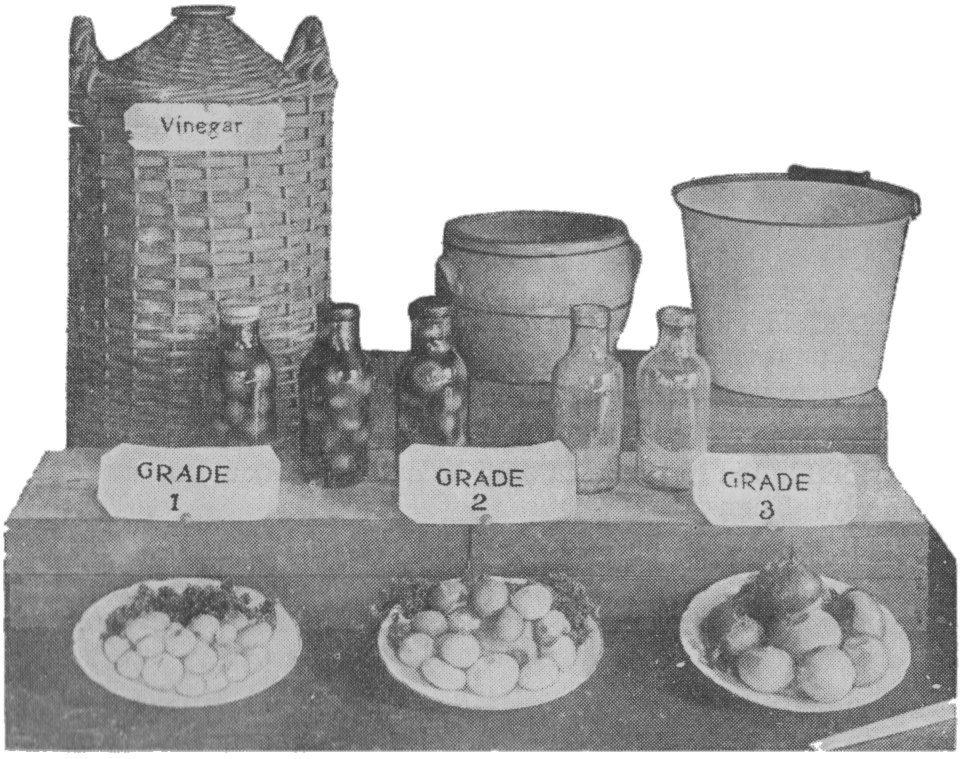
All vegetables should be thoroughly rinsed in several changes of fresh cold water before being placed in vinegar.

Metal utensils should be avoided in pickle-making. Porcelain pans are better for the purpose, and wooden stirring rods and packing sticks are advised, colanders or sieves for draining vegetable from brines are also needed. Clean sterilized glass pickle bottles, or earthenware jars which can be well corked or sealed, are suitable for the purpose of storing the finished product. Pickle-bottle corks may be obtained at a small price, and " chutney " and " sauce " corks of various sizes are on sale, and paraffin, resin, or sealing wax is also procurable at a reasonable figure. A good home-made sealing wax is formed by mixing together equal parts of shoemaker's wax and resin. These should be placed in a clean tin placed in a saucepan of hot water, and, when melted, the corked bottles may be dipped into the liquid.

Pickled Onions.

Onions should be brined (4 oz. salt to 1 pint water) for several days before pickling them in vinegar. After being removed from the brine, they may be scalded in weak salt water for about five minutes, care being taken not to soften them by over-scalding; they should then be drained for a few moments and covered with a thick damp cloth and allowed to remain until cold, when any shrivelled skin should be carefully removed. Grade for size, pack into bottles or other suitable containers, and cover with strong vinegar, which may be flavoured as desired.

If preferred, the scalding process may be omitted, and the onions pickled in vinegar direct from the brine, but the former method gives a better appearance.



Grading Onions for size.

Mixed Pickles.

These are a combination of vegetables; those forming the chief ingredients of the mixture may include cauliflower, chillies, white cabbage, small or sliced onion, gherkins, young French beans, melon, green tomatoes, &c.

The preparation of these vegetables will differ slightly; such vegetables as cabbage are shredded and every alternate layer liberally sprinkled with salt, and a plate or clean board is put on top, and the cabbage allowed to remain for about 36 hours; then the water which the salt has extracted from the cabbage should be thoroughly drained off. The cabbage should be rinsed in several changes of fresh cold water before using with mixed pickles. As stated above, some vegetables, as French beans, &c., are frequently packed in salt while young, and are cured in this way; the final preparation with vinegar and spices is left until they are required for use. Cauliflower may be broken into small sprays and salted as for cabbage, or the sprays may be blanched in boiling salted water for two or three minutes (care must be taken not to soften the cauliflower unnecessarily), then drained and thoroughly rinsed and covered with vinegar. It is then ready when required for mixing with other vegetables. Onions are sometimes skinned and allowed to soak in brine for about three to four days, the brine being changed once or more often if desired. They may be then drained and just scalded (below boiling point); when quite cold, pickling vinegar should be poured over them, and they will be ready for combining with the other vegetables in making mixed pickles. After the necessary preparation of the various kinds of vegetables, they may be mixed as desired, packed into pickle bottles, which should then be filled with the spiced vinegar prepared in the following manner:—

Ingredients required:—

2 qrts. vinegar.
1 cup sugar.
3 oz. peppercorns.
3 oz. whole ginger.
1 oz. allspice or pimento.
1 oz. salt.
1 oz. cloves.
1 clove of garlic (about ½ teaspoonful when minced).
1 tablespoon whole mustard seed.
½ teaspoon grated nutmeg.

Bring all to boiling point, then bottle and allow to stand aside for ten to fourteen days to extract flavour, shake the bottle daily. Then strain for use.

Some simply boil for ten to fifteen minutes and strain for use at once. This is a quicker way, but, where time permits, the first-mentioned method (standing and shaking daily for ten to fourteen days) is preferred.

The sugar may be omitted, if desired, and a little grated onion allowed to take the place of garlic, and two tablespoonfuls of grated horseradish may be added to the vinegar.

Mixed Mustard Pickles.

This preparation is a favourite with many, the foundation being a mixture of vegetables, such as cauliflower, small onions, celery, green tomatoes, and sections of sliced cucumber, &c. The vegetables, which should be tender, may be cut into convenient shapes and sizes, the onions being peeled, &c. They should all be soaked in strong brine overnight. Next day, drain thoroughly, allow to steep for about twenty minutes in vinegar weakened with water (about equal quantities of vinegar and water), and then bring all to boiling heat in the weak vinegar or in slightly salted water, so that the vegetables may be scalded. Should any vegetable used in the combination be of a hard nature, it is advisable to parboil it separately and then add it to the rest, so as to prevent some being hard while others are overdone. After they have been scalded for about five minutes, they should be well drained on a flat sieve or other convenient article. They are then put into the prepared mustard dressing, heated almost to boiling point, packed into the pickle jars or bottles, and corked and sealed while hot.

Paddling to Remove Air Bubbles.

Mustard Dressings.

There are many different formulas for these dressings which are in common use. The amount of sugar and of other flavouring agents may be adapted to conditions, but excessive flavours should be avoided, as also should a mixture of flavours that do not blend. The following is a simple mustard dressing suitable for a mixed mustard pickle:—

Ingredients required—

1 qrt. vinegar.
2 oz. ground mustard.
1½ to 2 cups sugar.
4 level tablespoons flour.
2 level teaspoons turmeric.

Celery seed (about half a teaspoonful to a quart of vinegar) is also a pleasant addition to the vinegar for flavouring, and, when used, the crushed seed is scalded in the vinegar and strained out before mixing with the dry ingredients.

METHOD OF PREPARATION.

Dissolve the sugar in the vinegar by bringing gradually to boiling point; blend all dry ingredients—mustard, flour, turmeric—in a little of the vinegar which has been allowed to cool off for that purpose. When this is mixed to a perfectly smooth paste in the basin, gradually pour it into the scalding vinegar, stirring the mixture so that an even smooth paste is obtained, then cook for a few moments; add the prepared vegetables, which have been well drained, and when thoroughly heated through, bottle and cork.

Red Cabbage.

Select a firm head of red cabbage, remove the coarse outside leaves, and cut the cabbage into four sections, rejecting the centre stalk and heavy ribs in the leaves. Shred finely, and sprinkle every alternate layer of shredded cabbage liberally with salt, and press down with a clean board or plate; allow to stand from 24 to 36 hours, then thoroughly drain off the water which the salt has drawn from the cabbage, and place the cabbage loosely in the pickle bottle. It will be of a bluish-purple colour, but will turn red on the application of vinegar, and will make an attractive pickle for the table.

The following is a suitable vinegar for red cabbage:—

1 gallon vinegar.
2 oz. whole pepper.
3 oz. allspice.
1 lb. of sugar may be added or omitted, according to taste.

The spices may be suspended in a loose muslin bag while scalding, and afterwards removed.

Scald the vinegar, sugar, and spices, then allow to cool, strain and pour over the cabbage, paddle with a narrow packing stick made of white wood, or half a bamboo cane cut down centre will answer very well for the purpose, it having a groove down the stick when halved. The packing stick may be made to any convenient length for handling. The bottle should not be overfilled with cabbage, so that the packing stick can be worked around the contents quickly to displace and remove or send to the surface any air bubbles. The bottles should then be filled right up to the top with the vinegar. The peppercorns may be rejected, or a few divided between the various bottles, which should then be sealed and stored away from the strong light.

Melon Pickle.

Prepare the pie melon by paring, seeding, and cutting into small cubes; cover with water to which enough salt for flavouring purposes has been added, then put on to cook When the melon is almost clear, it should be drained thoroughly. Meanwhile, heat the vinegar and sugar; when boiling, put the drained melon into it and cook for 15 or 20

minutes. The remaining ingredients—mustard, flour, turmeric—should be blended with a little cold vinegar and stirred into the mixture, which is then simmered for about 10 minutes, when the pickle should be bottled, corked, and stored. If desired, 1 lb. of onions may be cooked with the melon.

Ingredients—

6 lb. prepared melon.
¼ lb. green ginger.
1 teaspoon salt.
1 quart vinegar.
1 lb. sugar (white).
2 oz. ground mustard.
2 level tablespoons turmeric.
4 level tablespoons flour.

Green Tomato Pickle

6 lb. green tomatoes.
2 lb. onion (sliced).
¼ lb. mustard.
2 quarts vinegar.
3 oz. whole ginger.
¾ lb. sugar.
1 tablespoon cloves.
2 rounded tablespoons flour.
1 rounded teaspoon turmeric.

Slice the tomatoes and onions, and sprinkle moderately with salt, place a plate on top and allow to remain overnight.

Next day, drain the water which the salt has extracted, and put the vegetables into a preserving pan with the vinegar, sugar, and spices (the latter tied in a muslin bag); simmer together for about 20 minutes, and then remove the spice bag.

Mix the mustard, turmeric, and flour, with a little cold vinegar, and stir it into the pickles; continue the cooking for 10 minutes or so, then bottle while hot.

Pickled Beets.

The preparation of beets for pickling is slightly different from that of other vegetables.

Select young deep-coloured beets, wash them, being careful to keep the skins intact. Leave the rootlet, crown, and portion of the leaf stems on during the cooking. Put them into boiling water, and cook until almost done (some prefer to bake them in a moderately hot oven instead of boiling), allow to cool and slip the skins from the roots. Cut them into slices about ½ inch thick, or into such shape or size as will suit the jars; pour the cold spiced vinegar over them, and cork and store.

Beets may also be combined with horseradish for pickling. The vinegar may be spiced as for mixed pickles, or spiced with the following:—

To 1 qrt. vinegar allow:—
1 tablespoon grated horseradish.
½ oz. peppercorns.
½ oz. allspice.

Another seasoning used for beets is coriander seed. To make the flavoured vinegar for the pickling of beets, the following ingredients may be used:—

1 qt. vinegar.
½ oz. coriander seeds.
1 oz. sugar.
About 8 cloves.

Scald together, allow to stand until cool, then drain and pour over the beets.

Pickled Gherkins.

Gherkins and cucumbers are also a favourite vegetable for pickling. and there are several ways in which they may be put up. Perhaps one of the most simple is to rub them well with salt and then pack them in salt for two days, moving them about occasionally. Rinse and drain thoroughly, place in a suitable vessel which has been lined with spinach or vine leaves, the top of the pickle also being covered with the leaves. Now pour over them a scalding solution of weak vinegar (about one part vinegar to three parts water), cool quickly, and allow to stand for a few hours, then pour over them a fresh hot vinegar bath a little stronger (two parts vinegar to two parts water), cool, and leave until next day. Pack into a large-mouthed jar with a few sprigs of thyme, a few bay leaves, peppercorns, a little garlic, and cover them with fresh vinegar which has been brought to boiling heat and allowed to cool, or, if preferred, they may be packed with sweet spiced vinegar.

Pickled Walnuts.

Take young tender nuts which can be easily pierced through with a needle. Make a strong brine (about 2 lb. salt to 1 gallon water). Prick the nuts all over with a needle or steel fork and put them into the salt water and leave them for not less than a week; during this time they should be stirred about and a little more salt added to the brine every third day. Then lift the nuts out and spread them in the sun to darken, which usually requires about 24 hours or so. Pack the darkened nuts into jars or pickle bottles and cover them with flavoured vinegar.

Cauliflower.

This vegetable may be put up in a clear spiced vinegar, while it also associates well with a mustard sauce or dressing.

Choose firm, white, close, and even flower heads, dividing into even sprays, and parboil for two to three minutes in slightly salted water, thoroughly drain these sections, and pack in a good pickle of vinegar

and spices to taste, the vinegar and spices being heated together and allowed to cool before pouring over the cauliflower.

Another method sometimes adopted is to sprinkle the sprays of cauliflower with salt and allow them to stand overnight; next day, rinse, drain, and pack in flavoured vinegar.

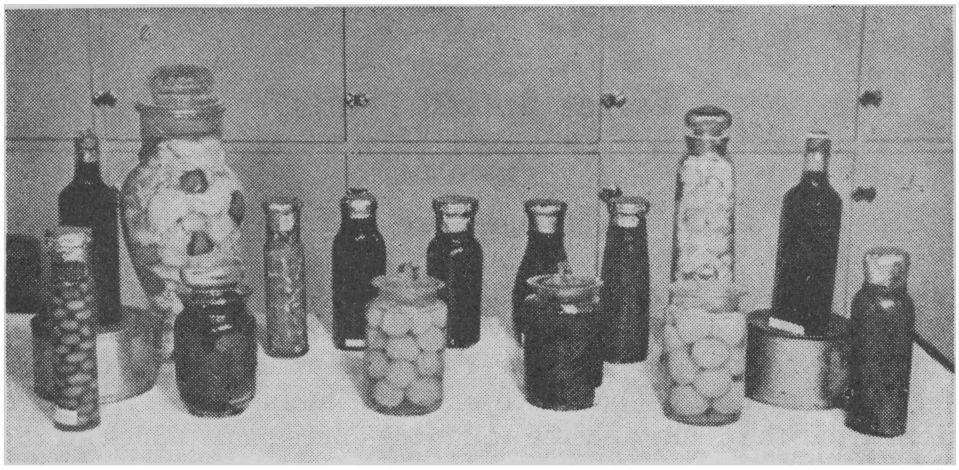
Another nice pickle is made as follows:—Salt the sprays overnight, then scald in hot vinegar for a moment, drain thoroughly, and heat up in a good mustard sauce slightly sweetened, bottle while hot, and seal.

Sweet Pickled Carrots.

Choose bright-coloured and very young carrots of a good shape. The very young carrots sometimes thinned out of the garden plot may be pickled whole, and make an acceptable sweet pickle. Put them into boiling salted water, and cook gently until three parts done, remove them and dip in cold water, slip the skins by gently rubbing, being careful to keep the carrot nice and smooth. Cut them into even slices, pack tightly like sardines, and pour over them a sweet spiced vinegar, made as follows:—

1 qrt. vinegar.
1½ lb. sugar.
½ oz. cloves.
1 tablespoon cinnamon.
1 teaspoon mace.
1 teaspoon allspice.

Scald together, and strain over the carrots.



Different Varieties of Pickles and Sauces.

Sweet Pickled Cherries.

6 lb. cherries. 6 lb. sugar.
1½ cups vinegar.

Stem and stone the cherries, and steam them until the flesh is soft; this will require about 20 minutes; do not allow the fruit to break. Meanwhile, heat the vinegar, add the sugar gradually, and when dissolved add the cherries. Simmer slowly for 15 to 20 minutes, then bottle and seal.

Olives.

Care should be taken not to bruise the olives. Grade them, and place in a solution made up as follows to remove bitter taste:-

2 oz. soda lye.

1 oz. lime.

1 oz. salt.

1 gallon water.

Boil the water and allow it to cool again before mixing this solution, and allow it to stand for an hour before using. The olives must be kept submerged (to prevent discolouration).

When the bitterness has left the fruit, pour off the lye, and cover them with water which should be renewed morning and night. This washing should be continued so long as the fruit has the peculiar hot taste, due to the presence of lye. When the caustic taste has completely left them, the olives are ready for pickling. Some use brine only, at a strength of 2 oz. salt to 1 gallon water. The brine should be replaced by a salt solution containing 4 oz. salt to 1 gallon water. Two days later, the strength of the solution is again increased to 6 oz. salt to 1 gallon water; then, two days later, 8 oz. to the gallon; two days later again, 10 oz. to the gallon; and finally the brine should contain 14 oz. salt to the gallon. Some prefer to process the olives, at a temperature of 180° for 25 minutes after adding the 8-oz. brine, and they should be made airtight while at that heat.

Sweet Spiced Fruits.

Peaches.

Select fruit slightly under-ripe, pare, and remove the stone, drop the fruit into a boiling syrup, which is made by dissolving 2 lb. sugar and 1 pint water, and which should be skimmed as it boils. The fruit should be heated thoroughly right through (about five to eight minutes), removed from the fire, cooled off quickly, and allowed to stand in the syrup for about two or three hours. The syrup is then drained from the fruit, and the following ingredients added to it and boiled with it for about fifteen minutes:—

1 pint vinegar.

2 oz. stick cinnamon.

1 oz. root ginger.

2 or 3 blades of mace.

1 oz. cloves.

Put the fruit into this, and again simmer for from eight to ten minutes, or until the peaches are clear, then pack into the jar, pour the spiced syrup over them, and cork.

Damsons.

Other fruit may be spiced in a similar way. Damsons are amongst the fruits favoured for this purpose, and make a pleasant sweet pickle with the following treatment. The fruit selected should be firm, sound, and not at all overripe:—

For about 6 lb. damsons allow—

3 lb. sugar.
1 pint vinegar.
1 teaspoon cloves.
1 or 2 oz. root ginger.
2 or 3 blades of mace.
1 teaspoon allspice berries.
1 teaspoon peppercorns.

Method.—Sprinkle about half the amount of sugar over the fruit (which should have been previously washed and well drained and slightly pricked), and allow it to stand for some hours. Make a syrup of the vinegar and remaining portion of the sugar, and add other ingredients; when this is prepared by boiling together for a few moments, cool it down, then add the plums and juice, heat together (keeping just below boiling point) for about five or eight minutes, then lift the fruit carefully out of the syrup with a perforated skimmer, and pack into pickle jars; bring the syrup to boiling neat, and pour over the fruit, process for about ten minutes at 180° Fahr., and seal. Various kinds of fruits may be treated in a similar manner, when other palatable spices may be substituted in quantities as desired, according to the particular variety of fruit under treatment.

Pickled Figs.

Select firm figs; steep them in a solution of salt and water (2 lb. to each gallon of water); allow them to remain for about 12 hours, and meanwhile prepare a flavoured vinegar as follows:—

1 quart vinegar.
3 lb. sugar.
½ teaspoonful cloves.
½ teaspoonful stick cinnamon.
½ teaspoonful mace.

The flavouring agents may be tied in a small piece of muslin and simmered in the mixture and afterwards removed. When the vinegar has boiled for a short time and is well flavoured, drop in the figs, which should be well drained of the salt water, and gently simmer for about 1 hour. When done, bottle and store for future use.

Spiced Rhubarb.

2 lb. red rhubarb (the winter variety is the best).
1 lb. raisins.
1 lb. onions.
½ lb. sugar.
6 cloves.
Light sprinkling of cayenne pepper.
1½ pints vinegar.

CHUTNEY

CHUTNEY is a well-known relish, which appears to be of East Indian origin. Fruit pulps and certain vegetables may be used as a basis for this preparation, and these may be supplemented by the addition of salt, sugar, vinegar, and spices; raisins sometimes enter into the composition of this particular preserve. Such fruits as apples, tomatoes, pears, mangoes, and guavas are suitable foundation; while chillies, ginger, garlic, or other piquant flavourings may be added to suit the taste. Some palates prefer much more highly spiced and sweetened foods than others, and it is a safe rule to season moderately, blending all ingredients well together. All the ingredients should be cooked until the mixture has the appearance and consistency of a solid sauce.

Chutneys may be served with cold meats, sausages, curries, &c. The following is one in which apples and tomatoes form the foundation:—

Fruit Chutney.

2 lb. melon.
2 lb. apples.
½ lb. green tomatoes.
½ lb. onions.
1 lb. sugar.
1 pint vinegar.
¼ lb. preserved ginger.
2 small teaspoons cloves.
2 small teaspoons pimento.
1 teaspoon salt.
1 small teaspoon mustard seed.

Peel, seed, and cut melon into small blocks, and boil it in water until three parts cooked, then drain it. Tie cloves and pimento in a spice bag and simmer all ingredients in the vinegar till a good colour and consistency. This usually takes about 2 hours.

Green Tomato Chutney.

12 lb. green tomatoes.
2 lb. onions.
3 lb. sugar.
1½ oz. ginger.
½ oz. cloves.
½ oz. wholespice.
½ oz. peppercorns.
1 teaspoon mustard.
2 qts. vinegar.

Method.—Cut the tomatoes into about four sections, sprinkle with salt, and allow to remain 24 hours or so, then drain off the water which the salt has drawn. Meanwhile, spice and sweeten the vinegar, and put the drained tomatoes and onions into it, cooking until well blended.

Tomato Relish.

3 lb. ripe tomatoes.
1 lb. onions
1 lb. sugar.
1 tablespoon curry powder.
1½ tablespoons mustard.
2 tablespoons flour.
Salt and pepper to taste.

In making the relish, scald the tomatoes first by immersing them in boiling water for a few minutes, then immediately dip them into cold water; this process loosens the skins, and they may be quickly and easily peeled without waste. Peel and slice the onions. Put all into a bowl, sprinkle with the salt, and allow to remain overnight, and next morning put into the preserving pan with just sufficient vinegar to cover; add the sugar, and boil gently for about one hour, then moisten the dry ingredients with a little cold vinegar, and stir them into the mixture. Boil altogether for another hour or until of a nice consistency.

Ripe Tomato Chutney.

4 lb. ripe tomatoes.
2 lb. apples.
1 lb. onions.
¼ lb. sultanas.
2 level teaspoons salt.
¼ teaspoon pepper.
½ dozen cloves.
1 small piece whole ginger.
3 small chillies.
1¼ pints vinegar.
1¼ lb. sugar.
1 teaspoon mustard seed.

Peel, core, and cut up the apples, peel and slice the onions, and tomatoes. Tie the cloves, ginger (bruised), and chillies in a spice bag and simmer till a good consistency (about 2 hours).

Gooseberry Chutney (I).

4 lb. ripe gooseberries.
1 pint vinegar.
1½ lb. sugar.
½ oz. garlic.
1 small teaspoon salt.
A trace cayenne.
2 teaspoons pimento.
1 teaspoon cloves.
1 tablespoon raisins or sultanas.

Top and tail the gooseberries, peel the garlic, cut it very small and tie in spice bag with pimento and cloves. Simmer all together till well blended (about one hour).

Gooseberry Chutney (2).

4 lb. ripe gooseberries.
1 pint vinegar.
2 lb. sugar.
About 6 small red chillies.
½ teaspoon salt.

Cook together quickly for 15 to 20 minutes, and then bottle.

Cucumber Relish.

Apple cucumbers may be used.
2 lb. cucumbers.
¼ pint vinegar.
¾ lb. sugar.
1 oz. preserved ginger.
4 small dried chillies.
½ teaspoon mustard seed.

Method.—Peel the cucumbers and pass them through a mincer, using the second-size cutter. Place the mince in a bowl, and sprinkle lightly with salt, cover with a plate, and allow to remain for twelve hours. Drain thoroughly, rinse quickly in fresh water, and drain well. Then cook all of the ingredients slowly for about 20 minutes, bottle, and cork.

Plum Chutney.

For this chutney, either the President, Grand Duke, Diamond, and Early Rivers plums give execellent results.

4 lb. plums.
1 lb. onions.
1 quart vinegar.
½ lb. sugar.
2 teaspoons whole ginger (bruised).
2 teaspoons whole cloves.
¼ teaspoon ground pepper.
2 teaspoons mustard seed.
6 small chillies.

Method.—Tie the spices in a muslin bag and suspend. Cook the mixture (without a lid on pan) slowly for two hours. Seal either hot or cold.

Spiced Tomato Butter.

5 lb. nice red tomatoes.
1½ lb. apples.
4 lb. sugar.
1 pint vinegar.
¼-oz. stick cinnamon.
¼ oz. ginger.
2 blades mace.
Few cloves.

Cook the mixture rather slowly for about 3 hours, or until all ingredients are nicely blended.

Apple Chutney.

5 lb. apples, 3 teaspoons of wholespice, 5 teaspoons of cloves, 2 lb. of sugar, 1 quart vinegar, 2 lb. onions, 1 tablespoon salt, pinch of cayenne, 1 lb. sultanas.

Place the wholespice and cloves in a muslin bag and simmer all till a good colour and consistency, about 1½ hours.

Apricot Chutney.

3 lb. of apricots (or 1 lb. of dried apricots soaked overnight), 1½ pints of vinegar, 1 lb. sugar, 1 lb. onions, 1 dessertspoon salt, pinch of cayenne, 4 teaspoons of wholespice, 1 lb. sultanas.

Stone and cut up the apricots, tie the wholespice in muslin, and simmer all till a good colour and consistency, about 1½ hours.

Marrow and Apple Chutney.

2 lb. marrow, ½ lb. onions, 1 lb. green apples, ½ oz. each of bruised whole ginger, chillies, and peppercorns, 1½ pints vinegar, ½ lb. sugar.

The marrow should be peeled and cut into small pieces and placed in a basin with salt between each layer, left for twelve hours and then drained well. The apples and onions should be chopped finely, the spices tied in muslin, and all ingredients cooked until tender and of a good consistency.

Spiceless Recipes.

When spices are difficult to obtain, herbs may be used in their place when making chutneys and relishes, and the two recipes given hereunder include these ingredients.

Apple and Marrow Chutney.

(using herbs, raisins or sultanas and half quantity of sugar.)

2 lb. marrow, 1 lb. green apples, ¼ lb. raisins, 2 teaspoons sage, ¼ lb. sugar, ½ lb. onions, 1½ pints vinegar, ½ oz. peppercorns, 1 teaspoonful thyme.

The marrow should be peeled and cut into small pieces, then placed in a basin and sprinkled with two tablespoons of salt. It should be left to stand over-night, then drained well. The next day the apples and onions are chopped finely, the peppercorns tied in muslin and all ingredients cooked until of a good consistency.

Apple Chutney.

(using herbs and less sugar.)

2 lb. cooking apples, ½ lb. sugar, ¾ pint of vinegar, pinch cayenne. 2 teaspoons sage, ¾ lb. onions, 1 small dessertspoon salt, ½ lb. sultanas, 1 teaspoon marjoram, 1 teaspoon thyme.

Simmer all ingredients until of good colour and consistency, about 1½ hours.

KETCHUP AND SAUCES

OF these, there are thin liquid sauces, as mushroom ketchup, walnut ketchup, Worcester sauce, and such preparations; while the thicker varieties consist of tomato sauce and other thick substances, which may be made from fruits and various foundations flavoured accordingly. The tomato is a general favourite, and, while the ingredients may be varied to give a "mild" or "hot" result, the following is a medium:—

Tomato Sauce (1).

Take a quantity of tomatoes, say, about 20 lb., and pulp them by boiling rapidly until quite soft (no water should be added, but the tomatoes should be slightly crushed to commence the boiling). Pass the pulp through a sieve which will retain only the seeds and skins, then measure the strained pulp, and to each gallon of this allow—

4 oz. salt.
1½ lb. sugar.
1½ oz. garlic.
1 oz. allspice.
1 oz. cloves.
1 tablespoon mustard.
½ teaspoon cayenne.
1 qrt. good vinegar.

The whole spices may be suspended in a loose muslin bag while being boiled, and removed at finishing point.

The sauce is then boiled until of a right consistency, which may be tested by placing a little of the hot sauce on a plate, and if no watery liquid separates from the solid sauce, it is ready for bottling off into hot sterilized sauce bottles, and, when bottled, should be cooled off at once.

Tomato Sauce (2).

40 lb. tomatoes.
2½ lb. cored and peeled apples.
3 lb. sugar.
6 oz. salt.
1½ teaspoons cayenne pepper.
2 quarts vinegar.
2 oz. cloves.
2 oz. black pepper.
2 oz. allspice.
2 oz. garlic.

Boil tomatoes and apples 1½ to 2 hours. Strain well. Stand overnight in an enamel or china bowl. The next day boil all ingredients for five or six hours, tying spices in a muslin bag.

Mushroom Ketchup.

Put a quantity of suitable mushrooms into a deep jar and sprinkle them liberally with salt; allow them to remain twelve hours or so, then strain the juice through a piece of folded muslin (first having made the muslin wet and wrung the water from it). To each quart of mushroom liquid add half a teaspoonful of ground ginger and half a teaspoonful black pepper. Boil the ketchup in an iron-enamel saucepan until it is reduced to one-third, or slightly more. It is then ready to be poured into hot sterilized bottles. Make airtight while at the high temperature.

Small bottles are more convenient than large ones, for ketchup should be used within a few days when once a bottle has been opened.

Walnut Ketchup.

This popular relish is made by pickling young green walnuts in vinegar and salt for eight or ten days. The liquid is then expressed and boiled up with spices, such as ginger, cloves, nutmegs, mace, and such flavourings as shallots, garlic, and horseradish, and is allowed to macerate a short time before using.

Both mushroom and walnut ketchup enter largely into the preparation of other sauces or relishes which consist of a basis of vinegar. cayenne pepper, allspice, garlic, and other condiments. One of the kind is composed as follows:—

Worcester Sauce.

2 quarts malt vinegar.
4 tablespoons essence anchovy.
6 tablespoons walnut ketchup.
4 tablespoons soy.
½ level teaspoon of cayenne pepper.
2 cloves of garlic finely chopped.

Put all into a bottle, cork, and shake the mixture often for about two weeks, then simmer for ten minutes and strain into smaller bottles, and cork tightly.

Another is made up as follows:—

1 qt. vinegar.
½ pint treacle.
¼ oz. pepper.
¼ oz. mace.
¼ oz. cayenne.
¼ oz. garlic.
¼ oz. cloves.
¾ lb. onions.

Steep for 14 days, then bring to boiling heat and simmer for 20 minutes, strain, bring to boiling heat again, and very slightly thicken with a little browned flour (or corn flour) mixed with a little of the cold vinegar.

Bring the vinegar to boiling point, and allow to cool, and add other ingredients; put all into a large bottle and shake for eight or ten days, then strain and bottle.

DRY-SALTING FRENCH BEANS.

Select fresh young beans, and have a suitable earthenware or glass jar or crock. Put in a layer of salt, then a layer of prepared beans about 1 inch in depth, then another layer of salt (using about ¼ lb. of salt to each 1 lb. of beans), and so on till all the beans are in. The top layer should be salt.

Then put over the beans a plate or clean board and weight it with a cleanly-scrubbed brick or other suitable weight. An iron weight of any kind should never be used. Cover with a piece of clean muslin, and set in a cool place.

The salt will extract the water from the beans and form a brine, which usually covers them in from 24 to 36 hours; but if a sufficient quantity be not formed to do this, a little strong brine should be added (½ lb. of salt to a quart of water). If sufficient water is drawn from the beans there is no need to add more.

The salt should be evenly distributed throughout when putting them down, so as to avoid, if possible, the necessity of adding more brine.

The top layer of beans should be kept under the surface, so as to prevent moulding. The jar may be covered to stop evaporation, and as they are wanted for use they may be taken out, washed, and soaked in several changes of cold water. When they are being cooked, the first lot of water should be drained off as soon as it reaches boiling point, and the beans once more placed in fresh cold water.

An advantage of this method is that all the beans need not be put down at once, but each day as the housewife prepares beans from her garden she can prepare and add an extra layer. If a large quantity is put down at one time the whole may be sealed by covering with a layer of paraffin wax.

By Authority: W. M. Houston, Government Printer, Melbourne.

VICTORIAN FRUIT PRESERVING CALENDAR.

Month.	Fruit in Season.	Methods of Preserving.
Jan. ..	Apricots	Bottling, drying, crystallizing, jam, chutney
	Raspberries	Bottling, jam, juice, jelly, vinegar
	Red Currants ..	Jelly, bottling, jam, juice
	Mulberries	Bottling, jam
	Plums	Bottling, drying, jam, jelly, crystallizing, sauce, butter
	Black Currants ..	Bottled, jam, syrup
	Bananas	Bottling, jam
Feb. ..	Apples	Bottling (pulp), jam, jelly, drying, chutney, butter, juice (Rhubarb, Raspberry, Mint, and Lemon used to combine with Apple), vinegar
	Peaches	Bottling, drying, jam, crystallizing
	Pears	Bottling, drying, crystallizing, jam, pickling
	Quinces	Bottling, jam, jelly
	Nectarines	Bottling, drying
	Crab Apple	Jelly
	Figs	Bottling, jam, drying, pickling
	Grapes	Bottling, jam, jelly, drying, butters, juice
	Blackberries ..	Bottling, jam, jelly (with apple), juice (with strawberry)
Mar. ..	Apples	
	Pears	
	Peaches	
	Quinces	
	Grapes	
	Figs	
	Blackberries	
	Cape Gooseberry ..	Conserve
Apr. ..	Passionfruit	Jam, jelly, juice, butter, syrup
	Melon	Jam, jelly, pickles, chutney
May ..	Guavas	Jelly
June ..	Cumquats	Marmalade, crystallizing
	Citrons	Marmalade, candied peel
	Grapefruit	Marmalade, candied peel, juice
	Oranges (Navel) ..	Marmalade, candied peel, butter, juice, bottling
July ..	Oranges	
	Lemons ..	Marmalade, candied peel, syrup, butter, pectin extract
	Mandarines	Bottling, marmalade
Aug. ..	Oranges (Seville) ..	Marmalade
	Oranges (Poorman) ..	Marmalade
	Limes	Marmalade
	Citronelles	Marmalade
Sept. ..	Shaddocks	Marmalade
	Oranges (Poorman)	
	Paw-paw	Crystallizing, jam, chutney, juice
Oct. ..	Oranges (Valencia) ..	Juice
	Pineapples	Bottling, juice, jam, crystallizing, syrup
	Banana Passionfruit ..	Jam
Nov. ..	Gooseberries ..	Jam, bottling, jelly
	Cherries	Bottling, conserve, crystallizing, syrup
	Loganberries ..	Bottling, jam, jelly, juice, syrup
Dec. ..	Loganberries	
	Cherries	
	Raspberries	
	Apricots	
	Strawberries ..	Conserve, syrup, bottling (not very [illegible]able)
	Mango	Chutney, jam

PRESERVE and SAVE!

For lasting pleasure, year in and year out, invest in a

FOWLER VACOLA BOTTLING OUTFIT

It's so easy, this modern way of preserving. Think what it means . . . fresh fruit all the year round . . . at low cost!

Ask to see the popular No. 2 Outfit complete with 24 bottles, Instruction Book, Thermometer and all accessories

Manufactured by—

FOWLERS VACOLA MFG. CO. LTD.

HAWTHORN, E.2 - - - VICTORIA